

THE TIGRIS-EUPHRATES ARCHAEOLOGICAL RECONNAISSANCE PROJECT. Final Report of the Cizre Dam and Cizre-Silopi Plain Survey Areas

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Introduction

The Turkish Government is currently implementing a substantial development program for southeastern Anatolia (the Güneydoğu Anadolu Projesi) that has already seen the building of a number of dams on the Euphrates and Tigris rivers and their tributaries (Devlet Su İşleri Genel Müdürlüğü 1989; Kollars and Mitchell 1991). Another dam is now being erected just a few kilometers north of the modern town of Cizre. When completed, the dam's reservoir will rise to the 409.4 m level and flood an area of ca. 21 square kilometers.¹ Additionally, its water will be used to irrigate as much as 121,000 square hectares in the nearby Cizre-Silopi plain area. Spurred by these development plans, a multi-year effort was mounted between 1988 and 1990 to document the range of archaeological and historical sites that could be destroyed or damaged by these plans (Figs. 1-2).²

What follows is the final report of surveys in the areas affected by the Cizre Dam and its associated irrigation schemes. This report supersedes, and in many cases corrects, earlier preliminary reports of our work in the Cizre-Silopi region. Additionally, parts of it also complement new work conducted by Dr. Gülriz Kozbe (2008) and her team over much of the same area. Fieldwork took place over the course of 6 weeks, spread out between 1988 and 1989, and was made possible by the Department of Monuments and Museums of the Turkish Republic and the Salvage and Investigation of Historical and Archaeological Finds (TEKDAM) of Middle Eastern Technical University in Ankara.³ Research funds were obtained from a variety of private and governmental research foundations in the United States.⁴

¹ Data kindly provided by Bey Nezih Sayan of Elektrik İşleri Müdürlüğü, Ankara.

² Full and part-time field archaeological staff for the Cizre portion of our research in 1988 and 89 consisted of G. Algaze (now University of California, San Diego), Dr. Elise Auerbach (U. of Chicago), Dr. Deirdre Beyer Honça (Indiana University), Ms. Rosa Frey (U. of Toronto), Mr. Ömer Honça (Ankara University), Mr. James Knudstad, Dr. Chris Lightfoot (British Institute of Archaeology in Ankara) and Mr. Hakan Togul (Istanbul University). Mr. Knudstad also served as surveyor and drew all expedition plans, including those presented in this report. Our team also included an archaeological illustrator: Ms. Carlene Friedman (School of the Art Institute of Chicago), and a geologist: Dr. Ray Breuninger.

³ In particular, our research would not have been possible without the logistical and technical support given by Dr. Mustafa Özbakan, who was the director of the Center for Salvage and Investigation of Historical and Archaeological Finds (TEKDAM) of Middle Eastern Technical University at the time our surveys were conducted. Various Turkish government institutions and officials also extended invaluable logistical support in the field. Particularly helpful were Bey Naci Toy, then director of Mardin Museum, and Bey Musa Ülker, then researcher at the Museum. We also wish to thank the then district governor (Kaymakam) of Cizre, Bay Necati Küçükdumlu for his help and support.

⁴ The 1988-89 field seasons of the of the Tigris survey in the Cizre Dam and Cizre-Silopi plain was funded by grants from the Smithsonian Institution, the National Geographic Society, the British Institute of Archaeology at Ankara, and the National Endowment for the Humanities, an independent agency of the Government of the United States. Analysis of the survey materials was made possible by grants from the American Research Institute in Turkey, the American Council of Learned Societies, and the American Schools of Oriental Research.

SURVEY METHODOLOGY

Survey Boundaries. Cizre Dam Reservoir area (Figs. 1-3)

North of Cizre, within the deep gorges created by the Tigris and Kızıl Su rivers, the survey was limited to the areas directly affected by the construction of the Cizre Dam. The recording of sites was therefore arbitrarily limited to sites within terraces or benches at either side of the Tigris and Kızıl Su rivers located wholly or partially within the 420 m elevation contour (10 m above the maximum projected elevation of the Cizre Dam). The survey area thus delimited comprised a fork-shaped irregular area of some 18 square kilometers extending along a narrow stretch of the east and west banks of the Tigris and Kızıl Su river basins directly upstream (north) of Cizre. This area includes a handful of sites of substantial importance for our understanding of the history of the Upper Tigris basin in the Classical Age (below, Section VII).

Survey Boundaries: Cizre-Silopi Plains (Figs. 1-3)

Additionally, because of plans for the agricultural development of the plains east of Cizre and south of Silopi using irrigation water from the Cizre Dam and the Nerdüş Çay (above), our survey was extended to the plains area south and southeast of the town of Cizre. Due to security considerations in effect at the time of our work, the northern boundary of our survey was arbitrarily defined by the modern Cizre-Zakho road, which roughly follows the 500 m elevation contour. Our survey extended south from this arbitrary line to the international borders between Turkey, Syria, and Iraq, marked by the Tigris, the (eastern) Khabur, and Hezil Su rivers. The survey boundaries thus delimited encompassed a roughly triangular area of some 400 sq. km.

Maps

Sites identified in the Cizre Dam and Cizre-Silopi plain survey areas were plotted in the field onto 1:25,000 scale maps provided by the Center for Salvage and Investigation of Historical and Archaeological Finds (TEKDAM) of Middle Eastern Technical University in Ankara. These maps are now archived at TEK DAM and can be consulted by interested scholars. A much simplified version of the survey maps showing the natural topography of the survey area and the ancient sites found within it is presented here as Figure 3.

Site Recognition

During our first season in the Cizre area (1988), we limited our efforts to collecting and plotting the principal multi-period mounds in the survey region. Our second season (1989), in contrast, was largely devoted to identifying smaller occupations within the area. Small, relatively flat, single period sites not in close proximity to the larger mounds were initially traced by canvassing every village and asking local residents about locations yielding ceramics and/or flints in their neighborhood. After plotting such sites in our base maps, areas away from modern villages where similar conditions were replicated were subsequently investigated. Not surprisingly, away from the principal waterways, there was a close correlation between perennial sources of water and

settlement location. This correlation is no doubt explained by the marked seasonality of and annual variability of rainfall in the area (below). In light of this, the survey team commonly walked transects looking for sites at either side of each wadi and minor tributary and in the immediate vicinity of each known spring. This allowed us to find and record an additional number of small, unrounded sites not reported by our informants.

Collection Strategy

Because of the extensive nature of the survey, sites were only visited once, and only sherds deemed to be diagnostic were collected. Small mounds or flat occupations were collected as single units. More complex mounds with distinct topographic subdivisions were subject to more detailed recording. In such cases, an attempt was made to delineate changes in settlement size through time by separately collecting each recognizable morphological area (i.e., individual terraces, nearby scatters possibly representing suburbs, etc.). Collection strategies employed for each individual site are specified in the Site Catalogue (Appendix 2).

Periodization

In delineating the chronological sequence of settlement within the survey universe, we followed Wilkinson's (1990) lead in using, when possible, representative groups from small sites presumed to represent single period occupations. However, sites with such short-range occupations were not documented for all periods. In the latter case, a "type assemblage" was defined using materials from multi-period mounds that were datable by means of parallels in reliable sequences elsewhere. Representative ceramic assemblages for each successive settlement phase identified within the survey area are illustrated in Figures 15-29.

THE LIMITS OF THE EVIDENCE

The arbitrary nature of the survey boundaries noted earlier is particularly problematic in the Cizre-Silopi plains, where our reconnaissance was limited to the triangular area encompassed by the modern Cizre-Zakho road and the confluence of the Tigris and the combined Khabur/Hezil Su rivers (Fig. 3). This means that sites in the northern portions of the Cizre-Silopi plain up to the Cudi Dağ piedmont within Turkey remain unrecorded (i.e., roughly between the 500 and 700 m contours). Additionally, although the Tigris, Khabur, and Hezil rivers mark the edges of the survey area, these waterways were fordable in places (below) and would not have isolated the Cizre-Silopi area from developments in the immediately neighboring plains. However, the nature of developments in those plains is unknown because no systematic surveys have been conducted directly west of the Tigris river (across from Cizre) in either southeastern Turkey or northeastern Syria, directly east of the Tigris below Faishabur in northern Iraq,

or in the plains around Zakho, immediately across the Khabur/Hezil Su rivers, also in northern Iraq (Figs. 1-3).⁵

Three further methodological limitations must also be acknowledged. The first is that we lack a reliable local master ceramic sequence to aid in the periodization of surveyed sites – although there are pertinent excavated sites in the Ilisu Dam area of the Upper Tigris southeastern Turkey, in the Mosul and Sinjar plains of northern Iraq, in the Upper Khabur area of Syria, and the Upper Euphrates area of Turkey (Fig. 2). The second is that systematic sampling strategies were not employed in areas away from wadis, springs, and other sources of water, making it likely that some small single period sites depending on wells and most ephemeral nomadic encampments within the survey area may have escaped detection. The third limitation is that sites were not recollected at different times of the year to ameliorate the inevitable sampling discrepancies resulting from varying ground cover.

In short, the survey results outlined in the following sections are, by design, only an initial approximation to the settlement history of the Tigris Gorge directly north of Cizre and of the plains east of Cizre delimited by the confluence of the Tigris and the Khabur/Hezil Su rivers. Much work still remains to be done if we are to overcome the various geographical and methodological limitations noted above.

GEOGRAPHY, CLIMATE, AND LAND USE

Geography and Communications

The Cizre-Silopi plains represent the westernmost portion, wholly within southeastern Turkey, of a broader set of plains articulated by the (eastern) Khabur and Hezil Su rivers that are today separated by the international border between Turkey and Iraq. These plains constitute a single geographical entity, which may be referred to as the Cizre-Zakho plains. The easternmost extension of these plains (ca. 40 % of the total area) is contained wholly within Iraq and remains unsurveyed to date (Fig. 1). More specifically, the Cizre-Zakho plains are wedged between the imposing Cudi mountains to the north (in Turkey) and a range of lower mountain folds to the south, constituted largely by the Jebel Abyadh in Iraq (British Admiralty, Naval Intelligence Division 1944: 113-115) (Figs. 1-2). Between these ranges, the Cizre-Silopi portion of the plains slope from ca. 700 m ASL to the north and 350 m ASL to the south (but, as already noted, only the area between the 350-500 m contours was surveyed).

Though situated between parallel mountain ranges, the Cizre-Zakho plains are hardly isolated. Communications to the north and northeast via the Tigris Gorge and the Kızıl Su basin were easily controlled by holding a small number of choke points near where the rivers intersect the Upper Mesopotamian plains (below, Section VII). However, communications to the west and south were not easily constrained. Contacts westward,

⁵ Areas immediately west of the Tigris in eastern Syria have been surveyed (Meijer 1986). However, the existing survey was not exhaustive and documents but a single site directly across the river from our survey area.

for instance, are facilitated by a network of east-west overland routes that intersect the Tigris at a small number of natural fording places (Dillemann 1962). One of these fords crosses the river precisely at Cizre. According to 19th century travelers, the Tigris was fordable at Cizre on a year round basis by means of rafts supported by inflated animal skins (*kelek*) and could even be crossed on foot when at its lowest level in the Autumn (British Admiralty, Naval Intelligence Division 1917: 49). Communications to the south, in turn, were possible either via the Tigris, which was navigable downstream using the same rafts (British Admiralty, Naval Intelligence Division 1917: 34), or through overland routes. These latter follow the east bank of the Tigris within Turkey and cross the (eastern) Khabur river before rejoining the Tigris and following its east bank southwards into northern Iraq, or cross the Hezil river and follow a more easterly track across the Jebel Abyadh (British Admiralty, Naval Intelligence Division 1917: 226-244). Both of these rivers were fordable either on foot or on donkeys with relatively little difficulty, save for the flood season in the late spring (British Admiralty, Naval Intelligence Division 1917: 234-235; Layard 1853: 56).

As will become clear in the discussions that follow, the locational circumstances of the Cizre plains affected the historical development of the area. On the one hand, the ease of communications across the Upper Mesopotamian plains means that the Cizre-Silopi area was always open to cultural influences diffusing along east-west transportation lines. For the same reasons, it was always susceptible to political developments taking place directly to the south in the Assyrian heartland. On the other hand, situated just at the foot of the Cudi Dağ, the Cizre-Silopi plains often also represented a strategic frontier or buffer zone between the cultures of Upper Mesopotamia and highland Anatolia.

Modern Climate and Landuse

Like the rest of the Upper Mesopotamian plains, the Cizre-Silopi plains are characterized by both a highly seasonal Mediterranean climate (Erinç 1950: Fig. 9). By the Early/Middle Holocene, at the height of the climatic optimum affecting large parts of northern Africa and Eurasia (COHMAP Members 1988), the survey area would have supported an Irano-Turanian type moist steppe vegetation dominated by a combination of dwarf oaks and pistachio trees and *Artemisia herba-alba* type shrubs (Zohary 1973). Only occasional shrubs of this original vegetation are present today. No doubt, much of this degradation is the result of millennia of human use through the Mid-Late Holocene (below), including fuel gathering, animal grazing, and intensive plowing.

Because of its location at the foot of the Cudi mountains, the Cizre-Silopi area today enjoys relatively high annual rainfall averages (ca. 600-800 mm) and a moderate degree (ca. 25-30 %) of inter-annual variability in precipitation (Perrin de Brichambaut and Wallén 1963: Figs 2-3; Tanoğlu, Erinç, and Tumertekin 1961: Map 25; Türkeş 1999: 371, Fig. 5). These factors ensure a rain-fed winter grain crop within the area in all but the driest years (Erinç 1950: Fig. 9). Accordingly, away from the rivers, the lower elevations of the Cizre-Silopi plains are today used largely for grain cultivation, principally some combination of wheat, barley, and lentils. Terraces flanking the rivers are now mostly planted with pump-irrigated cotton. While most of these terraces cannot be irrigated without mechanical water-lifting devices, at least some of the lowermost terraces would

have been irrigable in antiquity, since irrigation canals drawing water from the Tigris are reported by a late 19th century traveler who visited the area (British Admiralty, Naval Intelligence Division Division 1917: 236). Gardens and cultivated poplar groves exist today in scattered pockets in the immediate vicinity of the few small perennial or spring-fed tributaries of the Tigris that crisscross the plains.

Mid-Late Holocene Climatic Changes?

While anthropogenic forces were no doubt the primary factor shaping the environment of the Cizre-Silopi area as it exists today, it is still necessary to consider what role, if any, possible climatic fluctuations affecting the Cizre-Silopi area during the Mid and Late Holocene had on the sequence of settlement documented by our work (below, Section VI). Unfortunately, available evidence is ambiguous. On the one hand, pollen cores taken at a variety of lakes in the nearby Zagros and Taurus highlands appear to show only relatively minor climatic changes ca. 8000 to 4000 BP and no appreciable changes for the last 4000 years or so (Bottema 1997; van Zeist and Bottema 1991). On the other hand, other categories of paleoclimatic evidence suggest that much of the ancient Near East was buffeted by frequent (though not always synchronous) climatic changes through the last 8000 years or so (Hole 1997: 41).

Of these two alternatives, the latter appears supported by the most data. One line of evidence is provided by the level of Oxygen-18 isotopes contained in carbonates found within closely dated sediment varves at Lake Van. For the highlands, at least, these sediments document the onset of a moist period when humidity was higher than the present level starting about 6200 B.C. and continuing, though with numerous short-term fluctuations, until ca. 2200 B.C. At that point, the data suggests a transition to a notably drier phase with more episodic precipitation that lasted until the very end of the second millennium B.C. (Lemke and Sturm 1997).

The Lake Van results are partly corroborated and partly contradicted by analyses of Persian Gulf sediments. In agreement with the Van data, those analyses show that the Tigris and Euphrates rivers had an increased discharge rate between the 6th and 5th millennia B.C., suggesting that warmer and wetter conditions prevailed in the river headwaters at the time (Diester-Haass 1973). Contrary to the Van results, however, the Persian Gulf sediment data suggest that the wetter episode of the 6th and 5th millennia came to an end sometime in the second half of the fourth millennium, when a decreased river discharge implies a transition to a drier, more seasonal, and less predictable climate (Staubwasser and Weiss 2006).⁶

While the data just discussed are immediately pertinent only to conditions in the Near Eastern highlands, other categories of paleoclimatic data bear more directly on conditions affecting the Cizre-Silopi survey area in antiquity. Prominent among these are geomorphological and archaeological investigations across the Upper Mesopotamian plains and ancient textual references to draughts and crop failures affecting the Cizre-

⁶ A similar transition to a drier more seasonal climate can be detected at about this time in speleothem records from Soreq Cave in Israel (Bar-Matthews and Ayalon 2011).

Silopi plain and immediately surrounding areas. Particularly pertinent because of their geographic proximity to the Cizre-Silopi plains are the data gathered by two separate research efforts by Yale University teams under the direction of Frank Hole and Harvey Weiss in the western and eastern portions, respectively, of the Upper Khabur river basin in Syria (not to be confused with the eastern Khabur river basin of southeastern Turkey and Iraq, described earlier). Hole's (1997) work in the plains surrounding the Jebel Abd al-Aziz mountains, an area which today is exploited primarily by nomadic pastoral groups, shows that region supported small perennial streams and sedentary occupations through the Halaf and Ubaid periods (roughly spanning the 6th and 5th millennia B.C.). This indicates a significantly wetter environment than at present and implies that the climatic amelioration of the 6th and 5th millennia B.C. suggested by both the Lake Van and the Persian Gulf sedimentary data did indeed have an impact on the lower-lying plains directly south of the Anatolian highlands. In contrast, at least in the western reaches of the Syrian Khabur, the 4th millennium appears characterized by significant alluviation, suggesting violent flooding and a transition to a more seasonal and drier environment generally more similar to that prevalent in the area today.

The third millennium B.C. also appears to have been a time of substantial environmental changes throughout the Khabur basin in Syria. Evidence from the western part of the basin shows that the first half of the millennium witnessed a second period of increased precipitation (Hole 1997), directly attested by a significantly increased discharge level in the Lower Khabur (Blackburn and Fortin 1994). It is within this context that urban formations emerged across much of Upper Mesopotamia in the second quarter of the third millennium (Wilkinson 1994). At least along the Euphrates, this wetter period may have continued into the third quarter of the third millennium (Rosen and Goldberg 1995). However, further to the east, and much closer to the Cizre-Silopi research area, the second half of the third millennium appears characterized by increasing seasonality in rainfall and by reduced precipitation levels (Courty and Weiss 1997). Closely dated geomorphologic and pedological data from the Wadi Jarrah area of the Khabur basin shows that this process reached its peak from 2200 to 1900 B.C., when the agricultural potential of the region must have been significantly reduced (Courty and Weiss 1997; Weiss et al. 1993). This agrees well with the sharp decline in precipitation recorded about this time in the Lake Van sedimentary data.

While a lively debate continues about the magnitude, causes, geographical extent, and historical consequences of the aridification of the eastern Khabur in the late third/early second millennia (e.g., Butzer 1997; Courty 1998, 2001; Kolinski 2007; Schwartz 2007; Ur 2010; Wilkinson 1997), the immediate geographical proximity of the Cizre-Silopi survey region to that latter area suggests that our research area may have been buffeted by comparable environmental conditions at this time. By the same token, the eastern Khabur data suggests that climatic conditions in the region eased by the first quarter of the second millennium with a return to precipitation levels comparable to those prevalent today (Courty 1994). Again, this should be immediately relevant to the Cizre-Silopi area.

Also pertinent to the reconstruction of the changing climatic patterns affecting the Cizre-Silopi area in antiquity are dated Assyrian and Babylonian texts from the 12th to the 7th centuries B.C that make reference to either social unrest resulting from draught or crop failure or to times of particularly good harvests, plentiful rains, and elevated river discharge. The pertinent data has been compiled by Neumann and Parpola (1987) who conclude that relatively dry conditions accompanied the decline of the Middle Assyrian Empire through the 12th and 11th centuries B.C. and that the re-emergence of (Neo) Assyrian expansion in the late 10th and 9th centuries B.C. took place during a period of climatic amelioration.

GEOMORPHOLOGY

Concurrent with the archaeological site survey in 1989, two weeks were devoted to a brief assessment of the geomorphology of the Cizre-Silopi survey area. This work was geared toward (1) exploring how the geomorphological characteristics of the survey area may have helped determine ancient settlement patterns, (2) investigating geomorphological changes within the survey area through the Holocene, and (3) determining the potential impact of those changes on our ability to identify ancient settlements.

Tigris Basin

The Tigris in the vicinity of Cizre is entrenched across the Cudi Mountains. The Cudi Dağ are an anticlinal range, part of the Border Folds of Southeastern Turkey formed by the ongoing collision of the Arabian and Eurasian tectonic plates (Altınlı 1963; Livaccari and Merin 1986). The river crosses the mountains via a deep antecedent gorge and then flows diagonally southeast past Cizre, first following a fault zone along the base of the Cudi Dağ, then passing through the deeply dissected alluvial fan sequence which flanks the south side of the mountains.

Low Terraces of Probable Late Pleistocene to Holocene Date

The entrenchment of the Tigris valley decreases gradually in the environs of Cizre and towards the southeast as the river flows to its confluence with the Hezil Su (ca. 30 km downstream from Cizre). In this area, the Tigris has formed a complex series of flood plain steps, and low strath terraces. The former are all within 4 m or so of the present low (Autumn) river level. The terraces, in turn, are between 4 and 15 m above the low river level. Occasionally, the lowest terraces may be flooded. These high flood plain steps and terraces are today prime locations for settlement and are presently cropped with cotton. They must have been equally propitious for settlement during the Holocene since many mounds and smaller occupations were found within them (Figs. 3: Sites 16-24). Considering their height above the river, most of the strath terraces are probably of Late Pleistocene age, but no exact dating was possible. Valley margin alluvial fans expand over many of the terraces. No higher Quaternary terraces were identified. All potential such features proved to be structural benches lacking Tigris gravels and underlain by

resistant subhorizontal conglomerate beds. However, it is possible that future study may show that some of these benches did in fact form through the deposition or lateral erosion of the Tigris.

Alluvial Fans and the Silopi Plain

North and above the river terraces just described is an extended area of alluvial fans of Neogene and Quaternary origin stretching south from the Cudi Dağ. Between Cizre and Silopi, these fans are dissected by small and easily traversed tributaries of the Tigris, the largest of which is the Nerdüş Çay. However, active fans also exist in the intervening areas that are either undissected or only slightly dissected. The middle and foot zones of active fans slope 1 to 3 degrees south-southwest, and are mostly covered with arable yellowish-brown (reddish-brown in places) clayey silt, typically 1 to 2 m deep. Because of the high silt content, and because the sediment generally mantles the landscape (except where obviously recently eroded away), the silt is probably aeolian in origin. While the date of this layer could not be determined with any precision, its stratigraphic position suggests a Holocene origin. A question that should be investigated further is whether or not this layer is related to the already noted aeolian deposits of late third/early second millennium date (resulting from aridification) documented in the eastern Khabur area of Syria (Courty 1994). Locally, the silt mantle may be thicker (3 m and more), where eroded and redeposited downslope by overland flow, or thinner where striped away. Some eroded fans consist of bare gravel, cobble, and boulder surfaces with little or no soil. Desiccation cracking and swelling has mixed the silt to a depth of approximately 1 m. This is an example of the process of intra-pedonic turbation described by Yaalon and Kalmar (1978).

The Silopi plain is formed by the middle and foot zones of several overlapping alluvial fans situated north, east, and south of the Kavaközü Anticline (below). Throughout much of the plain, ground water is easily reached and there is intermittent surface runoff; accordingly, the density of ancient sites is high. However, through stream capture and incision of the Tigris and Hezil Su rivers, along with possible Quaternary deformation, the southeastern 3 km or so of the Silopi plain near the Hezil Su river is nearly horizontal and lacks an integrated surface drainage system. This area probably also lacks shallow ground water. Consequently, modern villages and ancient settlements are rare in this portion of the plain.

Kavaközü Anticline

East of the valley formed by the Nerdüş Çay, the sediments of several alluvial fans are folded into a broad, gentle, west-northwest-trending anticline (dips of about 3 degrees in limbs), on which an antiform ridge has developed. This fold has been mapped by Livaccari and Merin (1986) using Landsat imagery. It is best exposed along ravines northeast and east of Kavaközü village (just by Site 15 in Fig. 3). From Kavaközü the fold plunges eastward and dies out near Ortaköy village (just by Sites 32-33 in Fig. 3), in the center of the Silopi plain.

Settlement in the Silopi plain is strongly controlled by the Kavaközü anticline. The ridge along the crest of the fold (roughly situated along the line of the modern Cizre-Zakho road and just south of the modern villages of Pınarönü, Hurusya and Ortaköy [by Sites 71, 63, and 32, respectively, in Fig. 3]) lacks arable soil and water and therefore lacks settlements. In contrast, there are springs where cross-cutting incised valleys have intercepted conglomerate aquifers in the alluvial fan deposits. These springs can be substantial and today are surrounded by modern villages. Ancient sites were commonly found either in their vicinity (e.g., Fig. 3: Sites 63-70), or lining the banks of perennial streams draining the largest springs (e.g., Fig. 3: Sites 45-60). Areas just south of the anticline are less propitious for settlement and lack streams, springs, and shallow ground water, because valleys are too shallowly incised or the fold has diverted the south-southwest flow of ground water from the mountains to the north. This has resulted a general lack of settlements in the portions of the plain situated between Bazamır Dere and Şurik Dere, two small spring-fed perennial tributaries of the Tigris (Fig. 3).

Site Recovery Implications

The brief assessment of the geomorphology of the Cizre-Silopi survey area summarized above helps us better understand the distribution of ancient settlements located in the survey and gives us clues as to what types of sites may have been systematically missed.

In terms of the impact of the geomorphology of the area on settlement location, what emerges most clearly is the paramount importance of factors affecting water availability. For instance, the plains directly south of the crest of the Kavaközü Anticline, an irregular area of about 54 sq. km, appear to be entirely devoid of ancient settlements. Similarly, but to a less extreme degree, the scarcity of shallow ground water towards the southeasternmost portion of the surveyed area makes for an unusually light density of settlements.⁷ In contrast, settlements are concentrated either (1) along the terraces flanking the Tigris and Khabur/Hezil rivers, where they directly overlook narrow but potentially irrigable terraces (Fig. 3: Sites 12-13, 15-24), (2) around springs that emerge where incised valleys intersect underlying conglomerate aquifers (Fig. 3: Sites 63-70), (3) along the small perennial wadis that are created by such springs (Fig. 3: Sites 45-60), (4) or in the plains directly south of Silopi where relatively shallow ground water (easily accessible by wells) is found (Fig. 3: Sites 31-45, 75).

The geomorphology of the Cizre-Silopi survey area has implications in terms of the reliability of the survey data presented here. Some of these implications are positive while others are negative. On the positive side, the crest of the Kavaközü Anticline is just north of the Cizre-Zakho road that marked the arbitrary northern boundary of the survey. Since this would have impeded access to ground water, it is likely that bulk of human settlement in the Cizre-Silopi area – or at least the bulk of settlement based on wells – took place within the surveyed area, a factor enhancing the representativeness of our

⁷ Villagers at Basorin, in the westernmost, better watered portion of the plain, and at the confluence of Şurik Dere and the Tigris, report that at the time of our survey wells had to be dug to a depth of 8-9 meters to reach the watertable.

results. On the negative side, however, there are two geomorphologic factors, noted earlier, that compound each other in systematically hindering our ability to identify ephemeral occupations within the area surveyed. The first is that continued aeolian deposition and alluvial fan growth through the Holocene may have significantly contributed to a reduction in the visibility of small or ephemeral sites within the survey area, particularly those of early date. The second is that intra-pedonic disturbances in the aeolian deposits mantling the plain further contribute to reduce the visibility of ephemeral sites. This mixing may have removed from the surface an unknown, but potentially significant, proportion of sherds and small artifacts. While this would affect small sites of all periods, potential aceramic Neolithic sites characterized only by small tools and debitage would naturally be the most affected.

THE SEQUENCE OF SETTLEMENT

Analytical Parameters

Seventy-five archaeological sites and ancient architectural ruins were documented in the Cizre Dam and Cizre-Silopi plain survey areas (Fig. 3). These sites may be assigned to 16 discrete phases of settlement spanning the time range from the Ceramic Neolithic to the Medieval and Ottoman periods. This information is summarized in table form in Appendix 1 and Figure 4, and is also presented visually in individual phase maps (Figs. 5-7). For most periods, there is a discussion of the pattern of settlement within the survey area and of the artifactual dating criteria used to assign sites to the period in question. However, because we did not have a specialist in the Post-Classical periods, we do not discuss the Sasanian/Early Islamic, Middle Islamic (Selçuk/Artukid) and Ottoman periods in any detail beyond reporting their presence at individual sites.

Long-term demographic trends in the survey areas prior to the classical age are also summarized visually in chart form (Fig. 4). This chart excludes Medieval and Islamic sites because of the inherent imprecision of our periodization of those sites, noted earlier. It also excludes the Hellenistic, Parthian, and Late Roman periods because those periods are dominated by large specialized installations along the Tigris and Kızıl Su rivers (Sites 1-3, Section VII, below) that are discussed separately.

Because no generally accepted estimate exists for the number of inhabitants per occupied hectare in ancient Near Eastern sites (Postgate 1994), individual readers are free to utilize their preferred conversion factor to transform the given area estimates into actual population figures. The occupied area estimates in Figure 4 are based on site size data inferable from our survey collections. Site size, periods recorded per site, and how size estimates were arrived at in individual cases are detailed in the Site Catalogue (Appendix 2).

Palaeolithic Periods

Paleolithic tools were not recognized within the survey area. More likely than not, Palaeolithic occupations, if any, have been obscured by the mantle of aeolian silt deposits (above) that today covers much of the survey area.

Pre-Pottery Neolithic Periods

No aceramic Neolithic sites were discovered in the survey. While our failure to locate such sites may be due in part to geomorphic factors obscuring the visibility of ephemeral early sites within our survey area (above), it is more likely that the absence of Early Holocene sites is real. Recent surveys and excavations by Turkish and American researchers in portions of the Upper Tigris basin of southeastern Turkey, directly upstream of the Cizre-Silopi plains, suggest that aceramic Neolithic occupations of Early Holocene date (e.g., basal Çayönü, Hallan Çemi, Demirköy, and Körtik [Rosenberg and Erim-Özdoğan 2011]) are found only at the intersection of highland oak-pistachio forest and lowland steppe ecotones. Commonly such sites are situated on the lowest elevations of mountain piedmonts, and at positions overlooking adjoining plains and crosscutting river valleys in order to maximize their ability to exploit the varied resources provided by the contrasting environmental areas within their immediate reach (Rosenberg Nesbitt, and Redding 1998; Peasnell 2004). A similar locational pattern has been observed for most Early Holocene settlements downstream of the Cizre-Silopi survey area in northern Iraq. Relevant Iraqi sites directly east and west of the Tigris basin [e.g., Zawi Çemi/Shanidar (Solecki 1981), Karim Shahr (Howe 1983), Nemrik 9 (Kozłowski 1989), M'lefaat (Dittmore 1983), and Qermez Dere (Watkins, Baird, and Betts 1989)] are again found at or near the intersection of highland piedmonts and neighboring plains.

Accordingly, whatever early Holocene sites existed in the Cizre-Silopi region would likely be located well north of the surveyed area, possibly around the 700/750 m contours where the plains meet the piedmont of the Cudi Dağ. Alternately, such sites could also be located just south of the surveyed area, at the foot of the Jebel Abyadh just over the international border between Turkey and Syria and Iraq.

Periods 1a-b: Ceramic Neolithic (Pre-Hassuna?)

Material Culture and Chronology

The earliest occupations attested in our surveys belong to the Ceramic Neolithic Period. Eight such sites were identified (Fig. 5) and these yielded two different assemblages, described below.⁸

⁸ This substantially revises upwards the initial assessment (Algaze et al. 1991: 195) of the density of ceramic Neolithic sites in the Cizre-Silopi survey area.

Period 1a

The first Ceramic Neolithic assemblage was recovered in two out of the eight sites. The best sample came from a small scatter with no obvious indication of mounding (Fig. 3: Site 55). This yielded a handful of simple outflaring or inturned chaff tempered forms with smoothed but not burnished exterior surfaces.

Because of their simplicity, these sherds are likely to date to a relatively early part of the Ceramic Neolithic Period and are probably earlier than the distinctive and more easily recognized Hassuna Period assemblage, which was not attested in the Cizre-Silopi plain. Shape parallels to the coarse ware assemblages at Umm Dabaghiyah (Kirkbride 1972: Pl. XII: 16, 19, and 9), Tell Soto (Bader 1994: Figs. 3.5 and 3.8), and the Balikh Valley (Nieuwenhuyse and Wilkinson 2008: Fig 4: 14-16, 20) suggest a Pre-Hassuna date (seventh millennium B.C.) for the Period Ia assemblage.

Period 1b

The second Ceramic Neolithic assemblage was found in seven out of the eight sites, including at Takyan Höyük, the most important prehistoric mound in the Cizre-Silopi area (below). This assemblage is represented by a handful of crude, buff colored sherds tempered with a mixture of chaff and coarse crushed limestone that are commonly but not always decorated with elaborate incisions on their exterior (Fig. 15: 5-9). These sherds recall similarly decorated wares in Phase B of the 'Amuq sequence (Braidwood and Braidwood 1960: Fig. 42 [coarse incised ware]) and "transitional period" Pre-Halaf wares from Tell Sabi Abyad (Nieuwenhuyse 2007: Pl. 44-46 [standard ware]). Based on these parallels, the Period 1b assemblage probably dates to the very end of the seventh or the very beginnings of the sixth millennia B.C. New work by Dr. Gülriz Kozbe (2008: Fig. 3) at Takyan has now documented additional examples of this ware/type at that site.

Interpretation

All eight sites with Ceramic Neolithic materials are spatially associated with perennial spring fed streams. This is surely not a coincidence. Six of the sites were within a short distance of each other along the Şurik Dere (Fig. 3: 46, 49, 51, 54, 55, 16), and the other two were along the Atladıöldü/ Bazamır Dere (Fig. 3: 62, 65). The density of ceramic Neolithic settlements within the Cizre-Silopi area is in line with survey results from the Wadi el-Radd area of northeastern Syria (around Hamoukar), some 50 km west-southwest of Cizre, where a comparable number of apparently contemporary settlements were found (Ur 2010: 94). In the Jazira plain of northern Iraq (north of the Jebel Sinjar and west of the Tigris), only 50 km or so south-southwest of the survey area, settlement began in earnest precisely in the Ceramic Neolithic Period, with over 40 occupations yielding various types of Hassuna Period ceramics (including classical Samarra pottery). Because many of these occupations were recovered away from perennial sources of water, Campbell (1992) and Wilkinson and Tucker (1995) suggest that the substantial expansion of Hassuna settlement in the northern Jazira is explained by the introduction of a new technology: wells, a phenomenon also attested at this time in the Levant (Garfinkel, Vered, and Bar-Yosef 2006). If indeed so, it is unclear why a similar settlement expansion

away from perennial sources of water did not take place in the Cizre-Silopi plain, large portions of which would also have been exploitable by wells.

Several possible explanations may be proposed to account for this apparent anomaly. The most parsimonious is that our Ceramic Neolithic occupations are earlier than Hassuna Period sites to the south and southeast, but this presupposes the existence of a hiatus in occupation in the Cizre-Silopi area between the Ceramic Neolithic and Halaf periods. Alternately, it may well be that the Ceramic Neolithic materials in our area are a local assemblage that corresponds in date to Hassuna-range materials elsewhere but, if so, the absence of occupations away from perennial streams must be explained by geomorphologic processes obscuring ephemeral sites away from the more intensively surveyed wadis (above).

Period 2: Halaf

Material Culture and Chronology

Insofar as we have evidence, the first extensive human use of the Cizre-Silopi plain outside of the perennial waterways took place in the Halaf Period. This period is conventionally dated to second half of the sixth and the first half of the fifth millennia on the basis of available (but still limited) radiocarbon determinations (Akkermans 1993; Watkins and Campbell 1987; Campbell 2007). Nine Halaf sites were identified in the survey. All yielded some combination of typical Halaf painted ceramics (Fig. 16) and, more rarely, some types of coarser contemporary chaff-tempered and burnished pottery in a limited repertoire of simple forms (Fig. 16: 4-6, 11, 23-26). Deserving special mention among the latter is one sherd of a hole-mouthed vessel found in the earliest levels eroding out of Basorin that bears the impression of a rectangular stamp seal with a geometric criss-cross design below the rim (Fig. 16: 26).⁹

Most sites yielding Halaf materials produced only a handful of sherds of that period and cannot be assigned to any of the period's subphases. For this reason, all identified Halaf sites were lumped into a single group (Fig. 5) for the purposes of spatial analysis. However, three of the sites yielded assemblages large enough to allow for a more precise chronological determination and fuller discussion. These were Basorin Tepe, Takyan Höyük, and Near Nervan # 1 (Fig. 3: 16, 49, and 47, respectively), all situated alongside the Şurik Dere, the already noted perennial tributary of the Tigris.

The earliest Halaf materials identified with certainty in the Cizre-Silopi plain were those found at Near Nervan # 1. This was an oblong scatter of sherds almost 1 ha in extent on a rise overlooking the Şurik Dere. The absence of significant mounding at this location suggests that the site represents a relatively ephemeral single period occupation, an inference buttressed by the recovered ceramic repertoire. According to Dr. Stuart Campbell, who kindly commented on the assemblage, the ceramics from Near Nervan # 1 include bowls with internal vertical parallel painted lines that recall the "dancing ladies"

⁹ Because of its temper, this sherd is likely Halafian in date, although it could also be later (Ubaid).

typical for the standard ware assemblage of the Samarra Phase (Fig. 16: 1). These are found side by side with a variety of the more typical “Early Halaf” straight-sided bowls with external hatched lozenges (Fig. 16: 2-3). This association of “classical” Early Halaf forms and Samarra style motifs found at Near Nervan # 1 neatly parallels the earliest Halaf Period assemblages defined at Tell Sabi Abyad in Syria (Balikh IIIA: see Le Mièrre and Nieuwenhuyse 1996) and Khirbet Garsour and NJP 72 in northern Iraq (Campbell 1998), which Cruells (2008) has recently termed “Proto Halaf.” Near Nervan # 1 thus extends the known distribution of the earliest Halaf Period phase northwards into the easternmost plains of southeastern Turkey, an area in which it was previously not documented.

Almost certainly contemporary with the materials just described are some of the Halaf materials from the multiperiod mound of Basorin. In particular, a handful of sherds eroding out of the lowest levels of the mound near the river also bear Samarra-like motifs, including friezes of converging parallel lines extending at either side of a central triangle and stylized dancing ladies (Fig. 15: 11 and 12).

The Halaf materials from Takyan, the largest Halaf Period site by far in the survey area (below), are clearly later. Materials recovered at the site include a small variety of types that are consistent with Middle-Late Halaf date range of the Halaf sequence developed on the basis of excavations at Arpachiyah (Hijara 1980; Mallowan and Rose 1935). Salient types among these include polychrome sherds, globular jars with short, sharply everted necks, and deep bowls with globular lower bodies and outflaring walls (Fig. 16: 14, 19, and 22, respectively).

Settlement Pattern

There is significant continuity in settlement between the Ceramic Neolithic and Halaf periods as five out of the eight earlier sites (ca. 63%) were also occupied in the Halaf, a finding which agrees well with the new evidence for continuity between the Ceramic Neolithic and Halaf periods at Tell Sabi Abyad, noted earlier. As in the preceding period, Halaf sites concentrate in the central, well-watered, portion of the Silopi plain. However, for the first time in the occupational history of the Cizre-Silopi plain, some sites are also found in areas away from perennial sources of water, where wells must have been used to tap into the watertable (Fig. 3: 35, 36, 40).

Interestingly, most Halaf sites appear arrayed around Takyan Höyük (Fig. 8f), a 10 ha multiperiod mound along the Şurik Dere (Fig. 5). In spite of later occupations at the site, masses of classical Mid-Late Halaf sherds were observed in every morphological area of the site and eroding from every slope across the circumference of the settlement. This suggests that the full extent of the 10 hectare-large mound was occupied in the second half of the Halaf Period, although it is also possible that the site represents a palimpsest of periodically shifting smaller occupations, as Peter Akkermans argues was the case at Tell Sabi Abyad, a smaller but still substantial Halaf mound in the Balikh Valley of Syria (Akkermans et al. 2006).

Be that as it may, it was not possible to ascertain the exact size of the settlements surrounding Takyan in the Halaf Period because all of the sites in question are

multi-period sites with later occupations that substantially obscured the earlier levels at their core. However, the relative paucity of Halaf sherds at those sites combined with the fact that most of the sites where Halaf sherds are attested are under 1 hectare in extent suggests that other Halaf sites in the Cizre-Silopi region were but small encampments or villages (or both) subsidiary to the larger central settlement at Takyan.

Interpretation

A few decades ago, based largely on evidence for regional trade between elites (Davidson, 1980, but see Galbraith and Roaf 2001 for a reinterpretation of Davidson and McKerrell's results), it became fashionable to describe Halaf societies as being at or near the chiefdom level (e.g., Watson and LeBlanc 1990). In recent years, however, scholars have become more guarded in their assessments of the level of complexity attained by Halaf societies (e.g., Carter, Campbell, and Gauld 2003) or, more radically, have argued instead that there is little evidence for either social stratification or central authority within Halaf communities (Akkermans 1993; Akkermans et al. 2006; Hijara 1997). These varying interpretations are not as antithetical as they appear at first sight. While it certainly remains the case that the majority of known Halaf settlements in Upper Mesopotamia are small and that many of those sites may have been only inhabited seasonally given their shallow deposits (Akkermans and Schwartz 2003: 151-153), it still remains the case that partly mobile Halaf populations may have swirled around a handful of larger, widely-spaced regional centers, perhaps in a pattern not unlike that documented for Bakhtiyari tribesmen of southwestern Iran in the late 19th and early 20th centuries (Alizadeh 2010; Flannery 1999). The exact nature of such putative regional Halaf centers is yet to be determined, but Takyan is certainly a case in point for their existence, and the site now joins a growing list of Halaf centers of substantial size recently reported in the literature (from East to West): (1) Nisibin in northeast Syria at perhaps 10-15 ha (Akkermans and Schwartz 2003: 118), Kazane Höyük, near Şanlıurfa, at ca. 15 ha (Bernbeck, Pollock, and Coursey 1999), the complex represented by Tell Mounbatah and Tell Sawwan in the Syrian Balikh at 10+ ha (Akkermans 1993), and Domuztepe in the Karamanmaraş area of Turkey at 18 ha (Carter, Campbell, and Gauld 2003).

Period 3: Ubaid

Material Culture and Chronology

The succeeding phase of occupation that can be recognized with certainty in the Cizre-Silopi area is the northern Ubaid Period, which is generally dated to the fifth millennium B.C. (Oates 1987).¹⁰ Typically, Ubaid ceramics in our collections have a grit-tempered paste that is light greenish to pale orange in color and relatively dense (though less dense than the typical Halaf paste). Common shapes include a variety of globular jars

¹⁰ Recently, some scholars have proposed the existence of a still ill-defined chronological phase transitional between the Halaf and Ubaid periods of northern Mesopotamia (Breniquet 1996; Campbell 1992; Davidson and Watkins 1981). However, a period recognized solely by changes in the relative frequencies of types, wares, and decorations cannot be easily recognized in unstratified survey ceramic collections.

with short everted rims (Fig. 17: 11-14), with or without shoulder lugs, and hemispherical bowls with inner or outer concentric horizontal bands and occasional swags (Fig. 18: 16-21). Associated with this assemblage in separate single period sites were various types of coarse chaff-tempered ledge-rimmed vats (Fig. 17: 5, 7-8), chaff-tempered hole-mouthed vessels, sometimes with reed impressions on their upper bodies (Fig. 17: 15), and a small number of bichrome sherds, commonly with thin-lined designs executed in red and black or dark brown paint (Fig. 18: 16, 25) which, in their decoration, recall examples from Phases E and D in the 'Amuq Region (Braidwood and Braidwood 1960: 157-225). Less common and present only at Basorin Tepe are a small number of sherds from particularly well-made beakers with vertically-arranged exterior decorations (Fig. 18: 22-24), which recall Susa A beakers in their shape.¹¹

As a group, the bulk of the Ubaid assemblage in our survey collections finds its closest parallels (in terms of forms, decoration, and temper) in northern Iraqi sites, particularly Levels XIX-XV at Tepe Gawra (Tobler 1950), Khanijdal East (Wilkinson, Monahan, and Tucker 1996), Level 2 at Tell Madhhur (Roaf 1989) and Levels II-I at Tell Abada (Jasim 1985), to mention only some of the best published and informative sites. Substantial, though less immediate, parallels can also be drawn with contemporary Syrian and Turkish sites, particularly the assemblages of Period VIA at Tell Leilan (Schwartz 1988) and Period IV A-C at Tell Hammam et-Turkman (Akkermans 1988a) and Kenan Tepe (Parker 2010), respectively. These parallels help us equate the northern Ubaid materials attested in the Cizre-Silopi area with the Ubaid 3 and 4 periods in southern Mesopotamia and to narrow their chronological range to roughly the second half of the 5th millennium B.C.

Settlement Pattern

The pattern of settlement in the Cizre-Silopi plain in the Ubaid Period shows significant differences from that of the preceding Mid-Late Halaf Period. Whereas total occupied area (and presumably population) in the plain remained roughly unchanged, the number of occupied sites increased to twenty, more than doubling the previous total (Fig. 4). Equally notable is that Ubaid sites were more widely and evenly spaced throughout the plain (Fig. 5). Ubaid and Halaf sherds co-occur in only six of the twenty-one sites. That is, two thirds of the preexisting Halaf sites continue into the Ubaid, but a roughly equal proportion of Ubaid sites were new foundations.

The exact nature of many of the Ubaid sites documented across the Cizre-Silopi plain could not be ascertained because in most cases Ubaid levels were obscured by later occupations. However, it is clear that no single site appears preeminent within the survey area, as had been the case in the Halaf. While Ubaid ceramics were recovered at Takyan, they were only found in one quadrant of the site, suggesting a much smaller settlement than had been the case in the Halaf. At Basorin, similarly, Ubaid materials were only recorded in erosion levels under the high mound, directly facing the river. Accordingly,

¹¹ Compare Tell Madhur, Level II (Roaf 1989, Fig. 5: 6E227 and 5E385), Arpachiyah (Mallowan and Rose 1935: Figs. 33: 10 and 38: 2), and Tepe Gawra (Tobler 1950: Plates 129: 195-202 and 130: 203-205).

our collections are most parsimoniously interpreted as indicating that the Ubaid Period in the Cizre-Silopi plain consisted of self-sustaining agricultural villages, many of which were newly founded at the time. At least two of these new villages were not immediately reoccupied after the Ubaid Period (Fig. 3: 28 and 69) and represent ideal locations for future excavation.

Interpretation

The marked increase in the number of sites in the Cizre-Silopi area between the Halaf and the Ubaid periods contrasts with the patterns documented 50-100 kilometers to the southwest in the Upper Khabur in Syria and the North Jazira plains of Iraq. The area surrounding Hamoukar in Syria, for instance, experienced a significant contraction in visible settlement in the Ubaid Period (Ur 2010: 95), while the number of settlements in the North Jazira area of Iraq remained essentially the same (Wilkinson and Tucker 1995: 40-41). Also not typical is the apparently non-hierarchical settlement structure of the Cizre-Silopi plain during the Ubaid Period. Across Upper Mesopotamia between the Balikh and Tigris, for instance, there are a number of relatively large Ubaid mounds that rivaled or exceeded in size the largest known contemporary polities in southern Mesopotamia and Khuzestan (e.g., Hammam et-Turkman [Akkermans 1988a], Tell Zeidan [Gil Stein, personal communication 2010], Tell Leilan [Schwartz 1988], Tell Brak [Oates 1987], and Tell al-Hawa [Wilkinson and Tucker 1995: 40]). Small sites arrayed around such mounds suggest the sort of two-tier settlement structure (Akkermans and Schwartz 2003: 159-160) that figures prominently in arguments for chiefdom-level types of social organization in the Near East and elsewhere (e.g., Forest 1996; Pollock 1999; Stein 1994; Wright 1984). Such a development appears to have completely bypassed the Cizre-Silopi plains.

Period 3/4: Ubaid/Late Chalcolithic Transition

Three sites within the survey area (Fig. 3: 9, 12, 37) yielded one sherd each of “Sprig” ware (Fig. 18: 28-29). This distinctive ware, first defined at Tepe Gawra (Rothman and Blackman 2003; Tobler 1950), is dated to the very end of the Ubaid Period and the transition to the Late Chalcolithic Period. Each of the sites in question had one or the other of the periods, and one had both.

Period 4: Late Chalcolithic.

Material Culture and Chronology

The next period represented in the Cizre-Silopi area is the Late Chalcolithic. This period is dated roughly from the end of the fifth to the end of the fourth millennia B.C., based on recent radiocarbon dates from pertinent sites across Upper Mesopotamia (Wright and Rupley 2001). Recently, there has been an attempt to divide this time span into five distinct developmental phases (LC 1-5), defined on the basis of excavated

assemblages (Rothman [ed.] 2001) but only two subdivisions could be identified in our survey, roughly equivalent to LC 1-2 and 3-5, respectively.¹² Late Chalcolithic materials in our collections are marked by unpainted 'Amuq F chaff-tempered ceramics of the type first defined by Robert Braidwood in the 'Amuq region of Turkey (Period 4a) and, more rarely, by a limited repertoire of pottery of southern Mesopotamian (Middle-Late) Uruk derivation (Period 4b).

Particularly characteristic for the 'Amuq F assemblage in our area are "hammer-head" rimmed bowls (Fig. 19: 5-8), carinated casseroles (Fig. 19: 9, 11), and various large and storage-sized jars with carinated or club rims, often red-slipped and burnished (Fig. 19: 12-15). Also associated with this assemblage in at least three sites were Beveled Rim Bowls (Fig. 19: 10). These latter should not be interpreted solely as a cultural marker because Beveled Rim Bowls are found at numerous otherwise indigenous Late Chalcolithic sites where no associated Uruk types of southern Mesopotamian derivation are attested (Algaze 2005).

Distinctively Mesopotamian Uruk (Period 4b) grit-tempered pottery types were only recognized at two sites within the Cizre-Silopi area (Appendix 1), Basorin and Rubaikale. Interestingly, both occupy strategic locations overlooking routes across the Tigris (below and Appendix 2). The greatest number by far came from Basorin Höyük (Fig. 3: 16), a large multiperiod mound that directly overlooks the Tigris floodplain. In addition to 'Amuq F types and at least half a dozen Beveled Rim Bowl sherds, Basorin yielded a handful of sherds of conical cups with string cut bases and at least one typical ledge-rimmed jar (Fig 19: 16-20). Although the site is relatively large (10.6 ha) by Cizre-Silopi plain standards, Late Chalcolithic and Uruk materials were only noted on the bottom 10 m or so of the river-cut section of the much smaller high mound, which is only about 125 m in diameter.

Whether these ceramics mark an implanted southern settlement at this location or an indigenous northern site in close contact with Uruk populations nearby cannot be ascertained without excavation, but the presence of Uruk ceramics at this location is surely not accidental: Basorin is the largest mound along a traditional route from Cizre to Mosul, noted earlier, that skirts the east bank of the Tigris, and the mound stands only a few kilometers away from the point where that route crossed the eastern Khabur river before again rejoining the east bank of the Tigris southwards (British Admiralty, Naval Intelligence Division 1917: Route 90). However, the paucity of Uruk remains in the Cizre-Silopi area is striking in light of evidence for an intensive process of Uruk colonization along the Upper Euphrates basin of southeastern Turkey and northern Syria (Algaze et al. 1994) and for a less easily characterized but still notable Uruk presence in the Upper Khabur basin in Syria (Oates 2002; Ur 2010) and Upper Tigris basin of Iraq (Algaze 1986).

Across Upper Mesopotamia, the relationship between the indigenous 'Amuq F assemblage and the intrusive Uruk assemblage of southern Mesopotamian origin has dual

¹² This was also the case in surveys conducted in the vicinity of Hamoukar, in northeastern Syria (Ur 2010).

chronological and geographical vectors. Excavations at various sites within the area such as Hacinebi, Arslantepe, and Tell Brak coincide in showing that the Uruk assemblage, when found in the north, is introduced only at the end of a long sequence of indigenous development. 'Amuq F type ceramics, therefore, both clearly predate and are partly contemporary with the introduction of Middle-Late Uruk types. Additionally, in places, the two assemblages are also spatially discontinuous, with Uruk-derived grit-tempered ceramics found either in elite quarters of large indigenous centers in contact with the Uruk world, such as Arslantepe (Frangipane [ed.] 2010) for instance, in specialized Uruk outposts established either at strategic locations across the northern plains (e.g., Habuba Kabira-süd), or in the midst of preexisting Late Chalcolithic sites (e.g., Godin Tepe, Hacinebi Tepe) (Algaze 2005). The spatially discontinuous nature of Uruk remains in the north means that we cannot neatly subdivide our unstratified survey collections from Late Chalcolithic sites in the Cizre-Silopi area into chronological phases. While the presence of Uruk types is a reliable indication of the later phase of the period, the absence of such types could be due to the lack of contacts between the two groups and cannot be taken as a dependable chronological indicator.

Settlement Pattern

Indigenous (i.e., non-Uruk related) Late Chalcolithic materials were recorded in sixteen sites across the plain (Fig. 5). This represents a decrease in the total number of sites but only a nominal decline in total occupied area from the preceding northern Ubaid Period (Fig. 4). As in the Ubaid Period, Late Chalcolithic sites are relatively small and scattered and there is no compelling evidence for the existence of a settlement hierarchy within the surveyed area. Interestingly, to a greater degree than was the case earlier, Late Chalcolithic sites seem to be close to perennial sources of water. However, half (eight out of sixteen) of the sites with Late Chalcolithic ceramics had been previously occupied in the Ubaid, suggesting much continuity in settlement between the two periods. This buttresses evidence from Tepe Gawra and Tell Hamman et-Turkman where the transition between the Ubaid and Late Chalcolithic periods appears to have been gradual, at least in terms of ceramic assemblages (Akkermans 1988b; Rothman 2002; Tobler 1950). A single period Late Chalcolithic occupation in the Cizre-Silopi region was about 4 ha in extent (Fig. 3: 33) and was in the same size range as earlier single period Ubaid sites.

Two potential explanations may account for the slight drop in the number of sites and the somewhat more notable, though far from not absolute, shift to the safety of perennial sources of water in the Cizre-Silopi region during the Late Chalcolithic Period. The first is that, as noted earlier, the second half of the fourth millennium in Upper Mesopotamia was characterized by a transition to a drier and more seasonal environment than had prevailed in the preceding two millennia. However, it is unlikely that environmental factors alone can fully explain the observed pattern, as the climatic conditions of Late Chalcolithic times, though less propitious than those prevailing earlier, would not have been much different than those prevalent in the second and first millennia B.C. when the Cizre-Silopi area supported substantially larger populations and more complex settlement structures (Periods 7, 8 and 9, below).

Rather, we consider it more probable that the low population levels in the Cizre-Silopi area in the Late Chalcolithic Period are explained by the rise of a small number of powerful centralized polities in other areas of Upper Mesopotamia. That phenomenon appears to have entirely bypassed the Cizre-Silopi area and was instead limited to the portion of the Upper Mesopotamian plains situated between Upper Khabur basin of Syria and the Tigris – areas immediately neighboring the Cizre-Silopi region. The site of Nineveh, situated on the Tigris river some 120 km downstream from our survey area, for instance, emerged as a substantial polity by the Late Chalcolithic and Uruk periods with an occupied area that minimally was about 40-45 ha in extent (Algaze 1986; Stronach 1994). Closer still to the Cizre-Silopi survey area (ca. 50 km), we find the already discussed site of Tell al-Hawa, which grew to between 33-50 ha in extent at this time (Wilkinson and Tucker 1995). Further to the east in the Upper Khabur of Syria, Khirbat al-Fakhar (Al Quntar, Khalidi, and Ur 2011; Ur 2010: 96-98) and Tell Brak (Ur, Kaarsgard, and Oates 2011) were larger still, particularly in the first half of the fourth millennium.

We can only speculate about the reasons for the lack of a comparable urban tradition in the Cizre-Silopi area in the fourth millennium. Two factors could be elements in a possible explanation. Both apply to conditions in the third millennium as well. The first is that, when compared with the larger sustaining areas available for emerging urban centers along the Upper Khabur and Tigris basins in northeastern Syria and northern Iraq, agricultural land in the Cizre-Silopi area is more limited, and this may have served to restrict urban growth in our area and to encourage it elsewhere within the dry-farming regions of Upper Mesopotamia.

The second is that the developmental potential of the Cizre-Silopi plain was further limited by the fact that the most important east-west overland routes across Upper Mesopotamia generally ran due south of the Cizre-Silopi plains (Dillemann 1962). Though the area was hardly isolated, what this means is that social, political, and economic benefits from participation in exchange networks would have preferentially accrued to polities better positioned to control the most important geographically determined trade routes.

If we are correct in seeing the initial processes of urban agglomeration in the Upper Khabur/Tigris plains of Syria and Iraq in the Late Chalcolithic Period as being, in part, at the expense of the Cizre-Silopi area, then we are witnessing the onset of a recurring pattern of population dislocations in the region associated with the ebb and flow of urban fortunes in Upper Mesopotamia that will come into much clearer focus in the second half of the third millennium (end of Period 5 and Period 6, below).

Late Chalcolithic/Ninevite V Transition?

Excavations at Tell Mohammed Arab (Roaf and Killick 1987) and Tell Karrana 3 (Rova 1993), both in the Eski Mosul area of the Upper Tigris in Iraq, have identified a transitional phase between the Uruk-influenced Late Chalcolithic assemblages in the Upper Tigris and the succeeding Ninevite V Period (termed “Early Jazira 0” by Lebeau [2000]; see also Pfälzner 1997, 1998). Characterized by Uruk-related forms with local

Ninevite V-related painted decoration (Numoto 1991), this transitional phase has not been recognized in our collections. While this absence could be due to inadequate sampling, the paucity of Uruk remains in the Cizre-Silopi region, noted above, raises the possibility that transitional phase ceramics such as those identified in the Eski Mosul region represent a localized phenomenon occurring only at locations where a substantial Uruk presence had existed, which excludes the Cizre-Silopi region. In this context, it is noteworthy that the only other place where Uruk-Ninevite V transitional ceramics are reported is Tell Brak (Emberling et al. 1999; Matthews 2003; Oates and Oates 1991).

Period 5: Ninevite V

Material Culture and Chronology

The onset of the Early Bronze Age in the Cizre-Silopi area is represented by the Ninevite V Period, which is dated c. 3100-2550 B.C. on the basis of radiocarbon (Matthews 2000; Schwartz 1985; Weiss et al. 1993). This period is recognized in our collections by highly fired greenish and grayish sherds, typically decorated either with painted (Fig. 20: 1, 3, 5), incised, or excised designs (Fig. 20: 2, 4, 6, 7, 9) (for full descriptions, see Numoto 1993; Roaf and Killick 1987; Schwartz 1985). Excavations at Tell Leilan (Schwartz 1988) and, particularly, at the already noted site of Tell Mohammed Arab (Roaf and Killick 1987) show that chronological subphases existed within the Ninevite V Period, with painted wares being earlier in the sequence and incised or excised wares becoming more common toward the end, although there was considerable overlap. The presence of these wares at individual sites in the Cizre-Silopi area might allow us to assign those sites to the early and late phases of the period. However, such a division is not warranted in this case. There are several reasons for this. First, periodization differences within the Ninevite V Period can be properly based only on changing relative proportions of the various Ninevite V wares through time, proportions that cannot be recognized in the unstratified collections at our disposal. Second, many Ninevite V sites were recognized on the basis of neither painted nor incised or excised wares, but rather on the presence of greenish plain simple wares, including barrel-shaped cup fragments (e.g., Fig. 20: 8, 10), that are clearly Ninevite V in date but are unassignable to a specific sub-phase. Surveys in the Syrian and Iraqi Jazira encountered the same problems with Ninevite 5 assemblages (Buccellati and Kelly-Buccellati 1988: 44-45; Ur 2010: 249-250; Ur and Wilkinson 2008; Wilkinson and Tucker 1995: 49).

Settlement Pattern

A total of fourteen sites with Ninevite V ceramics were recorded (Fig. 6). This represents a slight decline from the preceding Late Chalcolithic Period. However, because typically Ninevite V diagnostics are fine wares that tend to break into many difficult-to-find small fragments, and because painted Ninevite V body sherds, if small enough, could potentially be mislabeled as Ubaid, it is likely that this number underrepresents the actual number of sites in the Cizre-Silopi area at the time. In any event, eight out of the fourteen sites yielded sherds of the painted variety and were clearly occupied in the earlier part of the Ninevite Period (Period 5a). Three sites yielded sherds of the later incised or excised

type and were clearly occupied in the later part of the period (Period 5b). The remaining sites could not be assigned to a specific sub-phase (Appendix 1). All in all, the degree of continuity between the Late Chalcolithic and Ninevite V periods is very high. Twelve out of the fourteen Ninevite V sites, or 86%, had been occupied in the preceding period.

As in the preceding period, Ninevite V sites were scattered across the plain but clearly concentrate near perennial sources of water. Single period sites were not identified. All Ninevite V sites recorded were multi-period sites, which produced on average only a few sherds each. Accordingly, it is impossible to ascertain the extent of Ninevite V occupation within these sites with any precision. Nonetheless, all but two of the sites are relatively small in total extent and could not have represented anything other village-sized settlements (Fig. 6). Of the remaining two sites, only one, Basorin, could have been more substantial. Ninevite V sherds were recorded eroding from the high mound and two separate but contiguous quadrants of the settlement, suggesting that as much as half of that 10.6 ha mound may have been occupied in the Ninevite V period.

The likelihood that Basorin may have represented a small regional center in the Ninevite V Period indicates that the transition to the third millennium was accompanied by a trend towards centralization and population agglomeration in the Cizre-Silopi plain, even if the total occupied hectareage in the area hardly changed from the preceding Late Chalcolithic Period. The probable larger size of Basorin in the Ninevite V Period means that the landscape of villages that had characterized the area in the preceding Ubaid and Late Chalcolithic periods was transformed into a two-tiered settlement structure in the later period.

Interpretation

The high level of settlement continuity in the Cizre-Silopi plain at the onset of the EBA is actually quite unusual for Upper Mesopotamia at this time. Recent surveys of the Upper Euphrates basin in Turkey and Syria, for instance, show substantial settlement dislocations at the transition from the 4th to the 3rd millennia (Algaze et al. 1994; Wilkinson 1990; Wilkinson 1994), and similar results are also reported at this time in the environs of Tell Leilan (Stein and Wattenmaker 1990) and Hamoukar (Ur 2010: 104-106) in the Upper Khabur as well as around Tell al-Hawa in the Jazira plains of northern Iraq (Wilkinson and Tucker 1995).

What reasons account for these striking regional differences in settlement continuity across Upper Mesopotamia at the Late Chalcolithic/EBA Transition, and, more specifically, for the unusually high degree of continuity at this time in the Cizre-Silopi plain? Apparently a crucial factor was the intensity of contacts between polities in the various regions of Upper Mesopotamia and expanding Uruk societies. Elsewhere, we have argued that the decline of settlement observed in some areas of Upper Mesopotamia at 4th/3rd millennium transition is related, in part, to the withdrawal of southern Mesopotamian Uruk enclaves implanted at strategic locations across the northern plains which, at their floruit, had probably served to mediate a substantial proportion of the trade between the resource-rich highlands of Anatolia and Iran and the resource-starved lowlands of southern Iraq (Algaze 2005). If this is correct, it would stand to reason that

the severity of dislocations created by the Uruk withdrawal would vary locally in proportion to the degree to which preexisting societies had undergone significant economic, social, and political changes as a result of contacts with the intruding Uruk groups. The greater the transformations, the more marked the dislocations, and vice-versa. In this light, the most severe dislocations would be expected along the Euphrates, where Uruk contacts had been at their most intense. This expectation is so far supported by available surveys (above). Conversely, the settlement continuity documented in the Cizre-Silopi area at the Late Chalcolithic/Ninevite V transition could be explained by the paucity of contacts between the area and the Uruk world, noted earlier.

The evidence for the Ninevite V Period in the Cizre-Silopi area outlined earlier generally supports Schwartz' (1994: 164) observation that substantial developmental differences existed across Upper Mesopotamia in the first half of the third millennium. Oversimplifying a complex situation, two very distinct developmental trends can be observed within the area at this time. Along the Euphrates basin of southeastern Turkey (Atatürk, Birecik and Carchemish Dam areas) and northern Syria (Tabqa Dam area), for instance, the onset of the EBA was not only marked by settlement dislocations but also by a notable decline in both the total number of sites and settled population that had characterized the area in the preceding Late Chalcolithic/Uruk Period as well (Algaze et al. 1994; Wilkinson 1990; Wilkinson 1994). In contrast, the trend towards population growth and centralization evident in the Cizre-Silopi area at the onset of the EBA can be seen as an attenuated reflection of broader regional developments affecting large portions of the Upper Tigris-Khabur triangle area. Our results are consistent with those outlined by Lyonnet (1996) for the Upper Khabur basin of Syria as a whole and with the more specific data summarized by Stein and Wattenmaker (1990) and Weiss (1986) for the Wadi Jarrah portion of the basin. They are also in line with results summarized by Weiss (1990a-b) and Ur (2010) for the Upper Khabur in Syria, by Wilkinson and Tucker (1995) for the Jazira plains of northern Iraq and by Stronach (1994) for Nineveh and its surroundings on the Upper Tigris of Iraq. However, one crucial difference is that in each of those areas the initial centralizing trend eventually culminated in full-blown urbanism and the development of a three tier-settlement hierarchy by the end of the Ninevite V Period (ca. 2600/2500 B.C.), as seen most clearly at Tell Leilan (Period IIId: 90 ha), Tell al Hawa (ca. 18-24 ha), Hamoukar (98 ha), and Nineveh (40 plus ha), while comparable developments did not take place in the Cizre-Silopi plain where Basorin was at most but a small fraction of the size of its more impressive Late Ninevite V counterparts elsewhere.

We can only speculate about the reasons for this. Earlier we had noted that productivity and transportation constraints inherent to the Cizre-Silopi area may have prevented the development of large indigenous Late Chalcolithic centers there, and the same considerations apply to the Ninevite V Period. However, there may be a more proximate explanation as well for the fact that urban polities did not emerge in the survey area late in the Ninevite V Period. The adoption of southern Mesopotamian glyptic traditions and accounting practices at precisely the time when Tell Leilan expanded to urban proportions by the end of the Ninevite V Period (Leilan IIId, cf. Weiss 1990a) suggests that the initial emergence of EBA urban polities along the Syrian Upper Khabur and the Iraqi Upper Tigris basins cannot be understood solely in indigenous terms.

Instead, the early processes of urbanization in these areas may have been also spurred, in part, by the intensification of southern Mesopotamian trade with its northern neighbors in the later part of the Early Dynastic Period and, eventually, with the renewal of southern military incursions designed to obtain by force resources that could not be obtained by exchange (Algaze 1986; Weiss 1990b). These commercial and military incursions would have naturally focused on northern polities that were already preferentially complex (i.e., those with the largest sustaining areas and closest to natural trade routes) and would have likely spared less-developed and geographically more peripheral areas such as the Cizre-Silopi plain.

Against this background of multiple path-dependent factors favoring the urban development of regions of Upper Mesopotamia other than the Cizre-Silopi plain, the paucity of sites in our collections producing the incised or excised wares that mark the final phase of the Ninevite V Period (three out of fourteen) may not be entirely accidental. Rather, it is possible that our survey evidence documents, in fact, a partial depopulation of the Cizre-Silopi area by the end of the Ninevite V Period that is directly related to contemporary processes of population agglomeration taking place in immediately neighboring areas of the Upper Khabur and Upper Tigris basins. This pattern of inverse development, which may have already affected the Cizre-Silopi area in the preceding Ubaid and Late Chalcolithic periods (above), will come into sharper focus in the second half of the third millennium.

Period 6: Mid-Late Third Millennium.

Material Culture and Chronology

One of the biggest surprises of our survey was the paucity of materials dating to the second half of the third millennium B.C. in our collections. This may be explained in part by our ignorance of what local assemblages looked like at this time, but the period is still recognizable in the Cizre-Silopi area by the presence of mid-late third millennium metallic wares of the type widely distributed in the Balikh, Khabur and Euphrates basins (Kühne 1976) and of the elaborately combed, punctuated, and incised wares typical for levels IX-VIII at Tell Taya, Late Akkadian levels at Hamoukar, and “Akkadian” and “Post Akkadian” levels at Tell Brak, in northern Iraq and Syria (see, respectively, Curtis 1982; Colantoni and Ur 2011; and Oates 2001). Significantly in terms of the cultural affiliations of the Cizre-Silopi area in the mid-late third millennium, the distinctive dark-rimmed orange wares that are typical for the Upper Tigris basin of Anatolia at the time (Özfirat 2006), and that are not infrequent in the Upper Khabur (Oates 2001), are absent in our survey collections.

Settlement Pattern

In an earlier assessment we had reported that the Cizre-Silopi plain was essentially depopulated in the second half of the third millennium (Algaze et al. 1991). This reading of the evidence turns out to have been incorrect and was largely due to the misattribution of some third millennium combed and punctuated wares to the Islamic periods. Reassessment of the collection has now corrected a small but significant number of these

misattributions and shows that the Cizre-Silopi plain was certainly inhabited at the time and that the overall population in the plain declined only slightly from the preceding period, though the number of sites did decrease dramatically (Fig. 4).

Metallic and/or contemporary Taya IX-VIII wares were only found in six widely separated sites in the survey: Basorin, Amarsava, and Nervan along the Şurik Dere, Silopi, along a small spring-fed perennial in the center of the plain, Mehmetçik Tepe on the Tigris, and Rubaikale at the confluence of the Atladıöldü Dere and the Tigris (Fig. 3: 16, 54, 46, 30, 9, and 13, respectively; Fig 6). Interestingly, all are situated immediately near perennial sources of water. At each site in which it was found, the mid-late third millennium was represented either by isolated sherds or, at most, a handful of sherds (Fig. 20: 11-14). Only two out of the six sites could have been substantial at the time. These were Basorin and Nervan. The evidence from Nervan is ambiguous. Isolated Taya VIII-IX type sherds were recovered in two of the morphological areas of the site, but those areas were non-contiguous, so it is difficult to make much out of this distribution. Things are clearer at Basorin, where mid-late third millennium materials were recorded in three out of the four collection quadrants, suggesting an occupation in the 8 ha range. Admittedly, this may be an untrustworthy inference given the thin evidentiary base (a handful of sherds between the three quadrants) on which it is based. Each of the six mid-late third millennium sites had a previous occupation of the Ninevite V Period evincing full continuity in settlement even as the number of sites declined across the Cizre-Silopi plain (Fig. 6).

Interpretation

What accounts for the paucity of mid-late third millennium materials and sites in the Cizre-Silopi area? Two possibilities come to mind. One is that some sherds, particularly bodies, bearing the typically combed and punctuated decoration of the Taya VIII-IX part of the assemblage may still be misclassified as Islamic. Another is that pertinent layers of the period may be obscured by later occupations in large multi-period mounds. The latter, while possible, is unlikely. The fact that we were able to identify up to fourteen Ninevite V occupations on the basis of typically much smaller sherds eroding from as many multi-period sites suggests that accidents of discovery cannot fully account for the missing mid-late third millennium materials. Barring a gross mistake in our analysis of the materials, it would appear likely that many sites in the Cizre-Silopi region were abandoned by, or just after, the end of the Ninevite V Period and that the area was inhabited well below its potential during the second half of the third millennium.

Two explanations may be proposed to explain this turn of events. The first is a version of the by now common argument for the existence of an inverse correlation between developments in the Cizre-Silopi area and neighboring regions. More specifically, we are suggesting that the sharp decline in site numbers and slight decrease in population in the Cizre-Silopi area in the mid third millennium is a direct consequence of the widespread emergence of numerous competing city-states at this time elsewhere across the Upper Mesopotamian plains, each centered at a fortified urban site of substantial proportions (Archi 1998; Sallaberger 2007; Ur 2010; Weiss 1983, 1986; Wilkinson 1994). This possibility is supported by survey evidence from the Tell Leilan

region, which shows that the while Leilan grew in size (and population) by a factor of six at the end of the Ninevite V and the transition to the Akkadian Period (Leilan IIIId-II), this dramatic growth was not accomplished by drawing in populations from the immediately surrounding countryside as would have been expected (Stein and Wattenmaker 1990; Weiss 1986, 1990a). Instead, the populations swelling the fast growing cities of Upper Mesopotamia at the time must have come from areas farther afield. The Tigris basin of southeastern Turkey appears to have been one such donor area, as is shown by the Cizre-Silopi results.

The second explanation for our results pertains only to the final quarter of the third millennium and compounds the preceding: it is likely that the paucity of sites in the Cizre-Silopi plain at this time also reflects a climatically-induced disjuncture of the occupation in the area similar to that postulated by Courty and Weiss (1997) for the Upper Khabur plains of Syria (above).

Period 7: Middle Bronze Age (First Half of the Second Millennium B.C.)

Material Culture and Chronology

The contraction in the number of settlements in the Cizre-Silopi area at the end of the third millennium was dramatically reversed early in the first half of the second millennium. This period can be recognized in the Cizre-Silopi area by the presence of a standard Khabur Ware assemblage such as has been described previously at a variety of sites in northern Syria (Hrouda 1957, 1989; Mallowan 1947; Schwartz 1988). Most distinctive for this assemblage are jars with painted stripes on their exterior (Figs. 21: 12 and 22: 27), vats with painted stripes and raised ridges in their bodies (Figs 21: 3, 4 10 and 22: 19-20), or, more rarely, jars with lightly incised wavy band combing decoration executed between painted stripes. Also typical are various types of bowls with incurved walls and thickened band rims (Fig. 22: 14-17), commonly with paint on their rims, and carinated bowls and vats, usually with horizontal ridges on their upper bodies and rows of incised concentric circles on their exterior (Figs. 21: 11 and 22: 23).

While the distribution of Khabur Ware appears to correlate in general with the activities of Assyrian merchants across central Anatolia and of the armies of Shamshi-Adad I across Syria, the ware itself is neither uniquely associated with any one ethnic or political group nor chronologically restricted to the Old Assyrian Period (Kramer 1977; Postgate, Oates, and Oates 1997; Stein 1984). In fact, Khabur Ware appears to have remained in use for perhaps as much as 300 years or more, and clearly outlived the expansionary phase of the Old Assyrian culture. Association with datable cuneiform texts from Kültepe (Level IB) in central Anatolia (Hrouda 1989) and Chagar Bazar (Level I) and Tell Leilan (Level I) in northern Syria (Weiss 1985) makes it certain that Khabur ware was already common by the reign of Shamshi Adad I of Assyria and the end of the 19th century B.C. Excavations at Tell Fakhariyah (Kantor 1958), Tell Brak (Oates et al. 1997), and Tell Billa (Stein 1984), in turn, show that Khabur Ware remained in use until the rise of the Mittanian state in the second half of the 16th century B.C.

Settlement Pattern

A total of twenty-seven sites in the Cizre-Silopi plain yielded Khabur Ware – including all of the sites that had previously been occupied in the Mid-Late EBA. This represents a six-fold increase over the immediately preceding period in terms of both the number of sites and occupied hectarage (Fig. 4). At least four, and almost certainly five, towns dominated settlement in the area at this time, ranging in size (when size was ascertainable) from ca. 8 to 15 ha.¹³ Numerous small associated villages of various sizes surrounded these towns and were scattered elsewhere across the plain. Four of the towns (Basorin, Amarsava, Nervan, and Silopi) lined the banks of perennial streams crossing the middle of the plain (Fig. 3: 16, 54, 46, and 30, respectively). All are roughly equidistant from each other (ca. 5-7 km apart), suggesting well-delineated catchment areas (Fig. 6). The fifth town, Bimrim (Fig. 3: 23), stood on a terrace overlooking the Tigris, on the (less well-watered) eastern portion of plain. By tracing the horizontal and vertical distribution of Khabur Ware in these larger sites, it could be observed that each achieved its maximum extent in the second millennium B.C. and that levels of the period account for a significant proportion of their deposition.

The gross structure of these early second millennium town sites was particularly clear at the largest such occupation, Nervan Höyük (Fig. 8a), situated at the foot of a large spring. The core of the site consists of an eccentrically located citadel on the northwest corner of the site and an adjoining terrace. Substantial stone alignments eroding out of the northern edge of the high mound suggest a fortification wall that, because of its orientation, would have encircled the adjoining terrace as well. Directly to the east, and at a lower level, was a more extended lower terrace forming a visibly different, and possibly extramural, sector of the settlement. On the southeastern corner of this terrace was a very heavy concentration of Khabur Ware ceramics and wasters, indicating a specialized pottery production area on the periphery of the town. While the morphological areas just described did in some cases contain earlier and later materials, the bulk of the sherds collected in each sector were of the Khabur Ware type. Thus it is likely that the visible structure of the site described earlier reflects the gross layout of the town as it existed in the early second millennium. Nervan thus appears to have been divided at this time between a defensible inner perimeter encompassing the citadel and immediately adjoining terrace where, presumably, elite housing would have been situated and an extramural area where more modest habitations would have existed and where industrial activity certainly took place. The extent of the site as described was just over 15 ha (Fig. 8a). A settlement organization incorporating a fortified inner town separated from a more extended outer town is common at this time in many areas of Upper Mesopotamia, although the size of some of the principal sites there was considerably larger (Akkermans and Schwartz 2003: 321).

¹³ Included in this count is Silopi Höyük, the size of which could not be ascertained with precision because an unknown portion of the site's lower terrace lies under the surrounding modern town. However, Khabur ware was recorded from every collection area of the site, which minimally, as preserved, was 4 plus hectares in extent (Appendix 2).

Interpretation and Historical Background

What factors help account for the massive increase of population and settlement in the Cizre-Silopi area during the first half of the second millennium? To some degree, it is clear that what is happening in the area at this time is a reflection of wider long-term environmental, demographic, and economic trends affecting Upper Mesopotamia as a whole. This means that the pattern of inversely correlated development between the Cizre-Silopi area and the Upper Mesopotamian plains to the south and southeast that had prevailed so many times in the past was clearly no longer operative by the early second millennium, when development in the Cizre-Silopi area appears instead to march in tandem with developments in Upper Mesopotamia to the south and southwest. This new pattern will continue to prevail in the area through the collapse of the Neo-Assyrian Empire.

In any event, following widespread depopulation at the end of the third millennium (Kolinski 2007; Schwartz 2007; Weiss 2000), the first quarter of the second millennium was a time of increasing population and settlement across much of Upper Mesopotamia, as indicated by the results of surveys in other portions of the Upper Tigris basin in southeastern Anatolia (Algaze et al. 1991; Ozfırat 2006), the easternmost portions of the Khabur plains of Syria (Lyonnet 1996; Meijer 1986; Stein and Wattenmaker 1990), and the Sinjar plains of Iraq (Wilkinson and Tucker 1995). These trends, presumably, were brought about by a conjuncture of two factors. The first was the onset of a period of climatic amelioration noted earlier and the second was the general prosperity introduced into the area by the activities of Old Assyrian merchants starting in the 20th century B.C. (Larsen 1976). However, any connection between the latter and the resettlement of the Cizre-Silopi area would have been indirect: although there is evidence that a route along the Tigris going as far north as the Cizre-Silopi area was sometimes used (Forlanini 2006: 155-156), it is generally agreed that most routes between Ashur and commercial stations throughout Anatolia bypassed the Cizre-Silopi area altogether in favor of more southwesterly routes across the Sinjar and Upper Khabur plains of Iraq and Syria, routes that eventually turned north and crossed into Anatolia via the Tur Abdin (Joann s 1996; Nashef 1987).

But can the dramatic increase in total number of sites and hectareage recorded in the Cizre-Silopi plain for the first half of the second millennium be accounted for solely as a result of natural growth? We would argue that the expansion of settlement at this time is of such magnitude that it is likely to also reflect a second factor: an organized resettlement of populations that were either previously largely nomadic or were drawn from nearby regions (or both). Such a centrally-directed resettlement of the Cizre-Silopi plain, if one occurred, could have only taken place as part of the incorporation of the area into the fast-expanding empire of the Old Assyrian King Shamshi-Adad I (Middle Chronology: ca. 1813-1781 B.C.), who conquered large parts of Upper Mesopotamia between the Tigris and Euphrates rivers (Anbar 1973). A comparable argument has been recently made by Ur (2010: 159-160) to explain the fast resettlement of the eastern Khabur plain of Syria at this time.

While there is no direct and unequivocal historical evidence for either the hypothesized resettlement or for the incorporation of the Cizre-Silopi area into Shamshi-Adad's brief but extensive empire, both are conceivable. Shamshi-Adad is known to have moved and resettled whole populations across the landscape as a tool of imperial control,¹⁴ and later in the Neo-Assyrian Period the Cizre-Silopi plain was partly resettled with deportees from various conquered countries (below). Further, a variety of circumstantial evidence suggests that Shamshi-Adad's dominion may have encompassed the Cizre-Silopi area. First, the density of population in the area during the first half of the second millennium B.C. looks remarkably similar to that observed during the Iron Age (Fig. 4). Second, the bi-polar settlement structure of the area documented for the Old Assyrian Period, consisting of evenly spaced towns surrounded by dependent villages, looks remarkably similar to that observed during the Iron Age (below), when we know for a fact that the Cizre-Silopi area was incorporated into the expanding Neo-Assyrian Empire (below) (Compare Figs. 6 bottom, left and 7 top, right, respectively). Moreover, many of the actual sites occupied in each size category were also the same in both periods (sixteen out of twenty-two [73%] Period 7 villages and four out of five [80%] Period 7 towns were reoccupied in Period 9) (Appendix 1). Third, the fact that Shamshi-Adad controlled the Khabur plains of Syria immediately to the south of the Cizre-Silopi area (Weiss 1985) and the Zagros piedmont immediately to the east (Eidem 1993) makes it likely that he would have controlled the intervening low-lying regions, including the surveyed portions of the Cizre-Silopi plain. The fourth and final circumstantial indication follows from the preceding and is provided by an Old Assyrian letter from Shamshi-Adad I to a certain Kuwari, the vassal ruler of Shusharra, found by the Danish excavations at Tell Shemshara and discussed by Astour (1987). In this letter, Shamshi-Adad I orders Kuwari to send an individual by the name of Kusiya from Shusharra to the place where he (Shamshi-Adad) was staying in the land of Haburatum (ma-a-at Ha-bu-ra-tim^{ki}). Although Haburatum is generally interpreted as referring to the Khabur area of Syria, Astour argues that there are in fact two geographical entities called Habura or Haburatum in the Old Assyrian texts and that these correspond, respectively, to the Upper Khabur basin of Syria and to the eastern Khabur river basin of southeastern Turkey and northern Iraq (which contains the survey area). He contends that references that associate Haburatum with known Transtigradian locations, as the aforementioned letter explicitly does, should be interpreted as referring to the latter area. If so, the unnamed location in the land of Haburatum where Shamshi-Adad was staying could well have been in the Cizre-Silopi plain.

This possibility, in fact, is made all the more likely by the recent publication of an Old Assyrian itinerary between Ashur in northern Iraq and Zalpa, a city somewhere in the Malatya region of the Upper Euphrates basin in Turkey. This itinerary is discussed in detail by Forlanini (2006), who notes that in their trip to Zalpa, Old Assyrian merchants passed through the city of Haburatum, located at the confluence between the Tigris and

¹⁴ This is shown most clearly by the administrative documents from Tell Shemshara, which reference the forced resettlement of the Turruckean people, originally a Transtigradian population, in the Khabur area of Syria (Eidem 1993).

the (eastern) Khabur river. Forlanini (2006: 155-156, 159, note 62) suggests that Haburatum was situated just south of that confluence, in what is today northern Iraq. This cannot be excluded, as that portion of the Tigris is still unexplored. However, we do know that Basorin, which is located by the Tigris just north of the confluence, was an important center in the Old Assyrian Period. Accordingly, Basorin may well be the location of the Old Assyrian city of Haburatum, which sometimes served as a way station in Old Assyrian trade networks between northern Iraq and Anatolia.

Period 8: Late Bronze Age (Second Half Of The Second Millennium B.C.)

Material Culture and Chronology

As used here, the Late Bronze Age encompasses the time range covering the rise and collapse of the Hurrian-speaking Mitannian Kingdom (ca. 16-15th centuries B.C.) and of the Middle Assyrian Empire (ca. 14-11th centuries B.C.), its political successor in the Upper Mesopotamian scene. The two periods are considered in tandem because they are almost impossible to differentiate in survey due to pervasive continuities in their most common ceramic types.

The earlier (Mitannian) portion of the LBA could be recognized in our collections on the basis of two fine Nuzi style goblet sherds with horizontal painted bands (Fig. 23: 17-18) and one jar rim with characteristic Nuzi light-on-dark decoration (Fig. 23: 19). These diagnostics were only identified in two quadrants at Basorin Tepe, the largest Late Bronze Age site in the area. The paucity of fine Mitannian material in our area need not be interpreted in demographic terms because such materials tend to break in many difficult-to-find small fragments easily missed by extensive surveys such as ours. Further obscuring the visibility of the Mitannian Period in our data is the fact that Nuzi goblets were almost certainly imported into the Cizre-Silopi plain (Erb-Satullo, Shortland, and Eremin 2011) and would be less likely to be found in smaller occupations within the area.

We are on firmer ground in our ability to identify Middle Assyrian materials because new excavations at sites such as Tell Umm 'Aqrebe, Tell Sabi Abyad, Tell el-Hawa, Tell Sheikh Hamad, and Tell Bderi (Bernbeck 1993; Akkermans et al. 1993; Ball et al. 1989, and Pfälzner 1995, respectively), to name only some of the principal centers and sites excavated in the last two decades, and new analyses of Middle Assyrian material culture (Pfälzner 1995; Duistermaat 2008) now expand our understanding of the ceramics of the period. Identifiable diagnostics in our collections include (1) storage-sized jars and vats with characteristically squared "hammer" rims (Fig. 23: 1-2, 5, 13), (2) tall ovoid jars with collared rims (Fig. 23: 6), and (3) shallow carinated platters or bowls (Fig. 23: 9-12, 14-16). These types are primarily chaff-tempered but occasionally examples with mixed chaff and grit tempering are also found. Less common but very distinctive are fragments of button-based goblets (Fig. 23: 3-4), which tend to be manufactured in finer grit-tempered clays.

Settlement Pattern

In a recent synthesis of what is known about the dynamics of Middle Assyrian imperial expansion northward, Aline Tenu (2009), while never doubting Middle Assyrian

control over the Cizre-Silopi region (below), characterized the archaeological evidence for that control as “tenuous.” That characterization is largely based on our earlier preliminary assessment of the evidence (Algaze 1989; Algaze et al. 1991; Parker 1997b, 2001) where we argued for a dramatic decline in the population of the Cizre-Silopi plain in Middle Assyrian times, in comparison to the immediately preceding Old Assyrian Period (Period 7) and immediately succeeding Late Assyrian Period (Period 9). Made before recent advances in our understanding of Middle Assyrian assemblages in Upper Mesopotamia (above), that assessment greatly overstated the magnitude of the decrease in both number of sites and occupied hectareage in the plain during the Late Bronze Age. Reexamination of the survey collections now shows that the twenty-seven sites recorded in the early second millennium, five of which were town-sized (Fig. 6 bottom, left), in fact declined to a total of twenty or twenty-one sites in the Late Bronze Age (one is questionable), of which two, Basorin and Nervan, were towns (Fig. 6 bottom, right). At Basorin, Middle Assyrian ceramics, while never as abundant as Khabur ware ones, were recorded eroding from every quadrant of the site, suggesting that most if not all of the 10.6 ha mound may have been occupied during the Middle Assyrian Period. At Nervan, in turn, Middle Assyrian diagnostics were recorded from the high mound and throughout the nearby terrace but not from the extramural sectors of the site. This distribution suggests an occupation of about 7 ha (down from 15 ha in the Old Assyrian Period). These local declines are mirrored at the regional level. Population density in the Cizre-Silopi area declined by almost half from the preceding period to the Middle Assyrian Period (Fig. 4). Nonetheless, the degree of continuity in settlement in the area is significant: eleven out of the twenty-one sites (52 %) continue from the preceding period, including both towns (compare Fig. 6 bottom, left and right, respectively).

Interpretation and Historical Background

What was the status of the Cizre-Silopi area vis-à-vis the Middle Assyrian Empire? Unfortunately, this question is difficult to answer because the historical geography of the Middle Assyrian Period is still relatively unclear (but see now Tenu 2009 for a convenient synthesis). Relevant texts include the annals of various Assyrian kings and numerous letters and administrative documents but few of these texts contain toponyms that can be securely placed in or near the Cizre-Silopi plain. Nonetheless, one of the more informative sources is the corpus of royal inscriptions of Tukulti-Ninurta I (1244-1208 B.C.). In several of his inscriptions (e.g., Grayson 1987: 235-240), Tukulti-Ninurta states that after subduing the land of Qutu (northeast of Assyria in the Iranian Zagros, Hallo 1971: 719) he marched west to the land of Mehru where he felled logs for the construction of his palace in Ashur. He goes on to describe his military exploits in the land of Katmuhu (the area just west of Cizre including the parts of the Tur ‘Abdin and the plains immediately to the south, cf. Postgate 1980: 487), the land of Subaru (the upper Tigris, cf. Kessler 1980: 106 ff.) and the land of Alzu (in the region of Diyarbakır, cf. Kessler 1980: 95 ff.). Regardless of whether this itinerary represents one or several campaigns, a geographic arrangement of the toponyms bordering the Middle Assyrian state from northeast to northwest consisting of: Qutu > Mehru > Katmuhu > Subaru > Alzu seems plausible (see also Harrak 1987). We conclude, therefore, that the Cizre plain

probably lies at the southern corner of what was the larger geographic area known to the Assyrians of the Late Bronze Age as Mehru (see also Nashef 1982: 194).

Tukulti Ninurta's inscriptions, however, do not clarify whether the Cizre-Silopi area was actually incorporated into the Middle Assyrian Empire of his day. Unfortunately, other available textual documentation of the Middle Assyrian Period also fails to resolve this question. There are two references in Middle Assyrian administrative texts to the town of Shabireshu (Nashef 1982: 240), which is well known from later Neo-Assyrian documents. At least for that later period, there are good reasons (discussed below) to locate Shabireshu in the Cizre-Silopi area and to equate it with Basorin, which, coincidentally, is the largest town in the Cizre-Silopi plain during the Middle Assyrian Period. However, these references do not clarify the political status of the Cizre-Silopi plain because the texts in question are fragmentary and the context in which the town is mentioned is unknown.

Can survey data supply answers that the available textual data is unable to provide? Possibly yes, but its insights are suggestive rather than conclusive. Because of the extension of Middle Assyrian power in the 13th century across northern Syria and parts of southeastern Turkey (Katmuhu, Hanigalbat) and the establishment of the Upper Tigris river between Diyarbakır and Batman as a formal garrisoned border marking the northern edge of Assyrian-controlled areas (Kessler 1980; Parker 1997a), it would stand to reason that at least some of the intervening regions, including the Cizre-Silopi plain, would have been incorporated into the fast expanding Middle Assyrian Empire of the 13th century. This possibility is certainly supported by our survey data. To be sure, at first sight it would appear reasonable to conclude that the Cizre-Silopi plain was only weakly integrated into the Middle Assyrian Empire because the demographic decline evident in the area during this time contrasts with the fuller and more complex settlement structure of the area in the Late Assyrian Period, when we know that incorporation into the Neo-Assyrian realm took place (below). Such a conclusion, however, presumes that imperial strategies would have been similar in the two periods – an entirely unwarranted assumption. In fact, the decline in settlement and population evident in the Cizre-Silopi area in the Middle Assyrian Period matches precisely that documented by Wilkinson and Tucker (1995) for the Jazira plains of northern Iraq – an area that was one of the first to be incorporated into the Middle Assyrian Empire during its expansionary phases and one of the last to be lost during its phases of contraction.

Period 9: Iron Age/Late Assyrian (ca. First Half of the First Millennium B.C.)

Material Culture and Chronology

The hand-made burnished ceramics typical for the Early Iron Age in southeastern Turkey north of the Tigris (Ökse 1988) were not recognized in the Cizre-Silopi plain. Whether this absence is of chronological or geographical significance, or both, is entirely unclear. Equally unclear, in the absence of excavations, is whether some of the LBA sites in the area may have continued to be occupied through the “dark age” following the Aramean invasions that possibly helped precipitate, and certainly followed, the collapse of the Middle Assyrian Empire in the 12-11th centuries (Szuchman 2007).

What is certain is that the recognizable material culture of the plain in the Iron Age closely resembles that of sites in northern Iraq and the Assyrian realm. Because of this, we use the term “Late Assyrian” to describe the Iron Age materials found in our survey. As used here, this term includes ceramic assemblages characteristic for both the Neo-Assyrian Period proper (late 10th-late 7th centuries B.C.) and the immediately post-Assyrian (Median) time range (late 7th-6th centuries B.C.). We have been forced to lump these very distinct historical periods into a single chronological unit because it is clear that the collapse of the Assyrian Empire as a political unit in 612-610 B.C. and the spread of Median and Babylonian domination over much of the area previously controlled by the Assyrians in the 6th century was not accompanied by a substantial change in the material culture of Upper Mesopotamia at the time. This conclusion follows from the results of recent German excavations at the so called Red House of Post-Assyrian date at Tell Sheikh Hamad (Kreppner 2008), an Assyrian provincial capital on the Lower Khabur of Syria, and of British excavations at the much smaller but contemporary site of Khirbet Qasrij (Curtis 1989), situated in the Eski Mosul area of northern Iraq. In both cases the excavators conclude that while some differences can be observed as a whole between Neo-Assyrian and immediately Post-Assyrian ceramic assemblages, the two assemblages nevertheless still share a large number of individual types and wares in common.

It comes as no surprise then that we are unable to differentiate between the Neo-Assyrian and the immediately Post-Assyrian periods in the unstratified collections at our disposal. A case in point is the site of Kopik Höyük (Fig. 3: 34), a small village-sized site that yielded what at first sight appears to be part of a standard Neo-Assyrian ceramic repertoire (Fig. 26: 1-9). Yet, on the surface of this site we also found a fragmentary Egyptian statuette of aquamarine blue faience depicting the goddess Isis nursing the child Horus on her lap, which dates to the Saite Period (650-520 B.C.). As this statuette has already been discussed in detail elsewhere (Algaze et al. 1991: 198, Fig. 23), we focus here only on its implications for the periodization of our collections. Its presence at Kopik suggests that much of the associated Late Assyrian ceramic assemblage found on the surface of the site may, like the statue, also postdate the collapse of Assyria as a political unit.

In any event, the Late Assyrian Period was recognized in our collections on the basis of a small number of chaff-tempered or, more commonly, mixed chaff and grit-tempered ceramic types that find parallels at a variety of well known Neo-Assyrian sites in northern Iraq, northern Syria, and southeastern Turkey (see Anastasio 2010 for a convenient compilation of much of the pertinent evidence). The most salient of these types include (1) carinated hemispherical bowls with hammerhead-like rims (Figs. 24: 1, 7-12 and 25: 1-3 and), (2) hemispherical bowls with folded-over rims, sometimes with a distinctive groove or indentation on the rim (Fig. 25: 4-6); (3) S-sided bowls (Fig. 25: 11-13); and (4) ovoid jars with narrow necks and a distinctive raised ridge at the juncture between the body and the neck (Fig. 24: 2-4). Less common but very distinctive are occasional “nipple”-based goblets (Fig. 24: 15-16), which largely replace the button-based goblets (Fig. 23: 3-4) more characteristic for the Middle Assyrian Period, and carefully made, thin walled bowls (Fig. 25: 12-13) of the type often termed “palace ware.” This, however, is somewhat of a misnomer because such sherds are in fact

reported from both town-sized sites (Fig. 3: 16, 30) and smaller village-sized mounds (Fig. 3: 41, 52). Wilkinson and Tucker (1995: 61) report the exact same phenomenon in the Jazira plains of northern Iraq.

Settlement Pattern

The decline in settlement that affected the Cizre-Silopi plain through the LBA/Middle Assyrian Period was reversed sometime in the first half of the first millennium B.C. (below). The total number of occupied sites doubled from the twenty or twenty-one recorded in the LBA to forty-one sites in the Late Assyrian Period and this was matched by a commensurate increase in total occupied hectareage in the plain at this time (Figs. 4; 6 bottom, right, and 7 top, left). Of the forty-one sites, at least four, and almost certainly five, were small towns.¹⁵ These latter were Basorin, Takyan, Nervan, and Silopi along perennial streams in the middle of the plain and Bimrim in the eastern portion of the plain. This distribution is almost identical to that of the towns in the area during the Old Assyrian Period, save for the fact that Takyan replaced Amarsava in the string of centers lining the Şurik Dere (compare Figs. 6 bottom, left and 7 top, right), and suggests that the plain was again divided into distinct catchment areas around several major centers. Numerous dependent villages surrounded these towns. Of the thirty-six villages in the plain during Late Assyrian times, twelve, or 33%, had been occupied in the preceding LBA. Of the five towns, two (40%) continue from the preceding period. Put differently, twenty-five out of the forty-one, or 61%, settlements in the Cizre-Silopi plain during the Late Assyrian Period were new foundations, a fact that figures prominently in the discussions that follow. Not surprisingly, occupied hectareage in the plain also increased significantly in the Late Assyrian Period. An analogous development has been documented by Wilkinson and Tucker (1995: 58-62) for the Jazira plains of north Iraq during the same period. The reasons for these developments are discussed below.

Interpretation and Historical Background

The historical background of societies in the Cizre-Silopi region during the Late Assyrian Period is illuminated by Neo-Assyrian textual sources. Key to understanding the historical geography of the Cizre-Silopi region during the Neo-Assyrian Period is the rock inscription of Tiglath-pileser III (745-727 B.C.) discovered at Mila Mergi along a pass across the Jebel Abyadh in Northern Iraq, just across the border and directly south of the Cizre-Silopi plain (Postgate 1973; Tadmor 1994). This text contains an account of that king's campaign against the Ullubians "who lived opposite Assyria." The detailed geographical data contained in the inscription allows for a widely accepted reconstruction of the historical geography of the areas directly north of Assyria which places the land of Ulluba squarely in the Cizre-Zakho plain (Kessler 1980: 168-70; Liverani 1992; Parker 2001; Parpola and Porter 2001; Postgate 1973, 1995; Reade 1978: 177).

¹⁵ The uncertainty here is, again, because of Silopi. See above, note 13. Iron Age pottery was recorded from every collection area of the site, which minimally, as preserved, was 4 plus hectares in extent (Appendix 2).

What can the Neo-Assyrian texts tell us about the historical development of the Cizre-Silopi survey area in the Late Assyrian Period? While references to Ulluba are not common prior to the reign of Tiglath-pileser III (Postgate 1973), some do exist, and they allow inferences to be made about the status of Ulluba prior to its incorporation into the Neo-Assyrian Empire. For instance, the Assyrian Eponym chronicle for the year 828 B.C. reads simply “to Ulluba” (Millard 1994: 57). It is certain that this refers to a military campaign against Ulluba by Shalmaneser III (858-824 B.C.) and that the area was then occupied by indigenous Iron Age populations that we are unable to distinguish in our surveys.

We are on firmer historical ground by the middle of the 8th century. Several of Tiglath-pileser III’s (744-727 B.C.) royal inscriptions inform us that he conquered Ulluba in 739 B.C., and annexed it to the rapidly expanding Neo-Assyrian Empire, placing the whole region under the control of one of his eunuchs. According to the inscriptions, Tiglath-Pileser destroyed twenty-nine “cities” (villages, towns?) in the area, after its population had fled to the hills. This population is specifically said to have been Arameans belonging to the Ahlamu tribe, which presumably had entered the area in the “Dark Centuries” between the Middle and Neo-Assyrian periods (Postgate 1973; Tadmor 1994). This reference clearly indicates that by the 8th century the broader Cizre-Zakho area (within which the Cizre-Silopi survey area is contained) had attained a significant population level and that its population was ethnically different from the Assyrians and politically independent from them. Again, this could hardly be inferred from the archaeological record alone. The inscriptions further inform us that, in an effort to consolidate his military victory over the next three years, Tiglath-pileser resettled Ulluba with conquered populations from at least ten different cities/regions in western and coastal Syria (Oded 1979: 116-135). He also established a new administrative city within the area called Ashur-iqisa (Postgate 1973; Tadmor 1994) where he built a new provincial palace.

Since this new administrative city would have been a relatively large and centrally located site with newly founded local dominance, the most logical candidate for its location within our survey region is Takyan Höyük (Figs. 3: 49; 8f), a site that was only a small village in the Old Assyrian Period and that was not occupied in Middle Assyrian Period. Takyan was thus a new foundation in the Neo-Assyrian period, and Iron Age/Late Assyrian pottery was in fact recorded in every collection area at the site, making it likely that its full extent was occupied at the time. At 10 ha or so, Takyan was in fact the largest Neo-Assyrian site attested in the Cizre-Silopi plain.

In any event, the city of Ashur-iqisa disappears from the textual record after the reign of Tiglath-pileser III. Instead, the site of Shabiresu, mentioned in numerous Assyrian letters and administrative documents (listed in Parker 2001: note 295), becomes dominant in the region. Based on these references, Kessler (1980: 122-44) has persuasively argued for the location of Shabiresu at the site of Basorin Höyük. This is certainly plausible from an archeological point of view. Late Assyrian ceramics were recorded from at least three different quadrants of that 10.6 ha site, suggesting an occupation in the order of 8 ha at the time. Key to Kessler’s equation of Shabiresu and

Basorin are several texts (listed in Parker 2001: note 296), which name Shabiresu as an important road station, and probable river crossing, on the route leading from Guzana to Dur Sharrukin (Khorsabad). The function of the Basorin area as a traditional river crossing point in the 19th and early 20th centuries has already been noted in the context of the much earlier Uruk presence at the site. That role, it would seem, helps explain why Basorin was the site with the longest and most complete sequence of occupation in the Cizre-Silopi area, why more often than not it was one of the dominant sites in the region, and, more to the point, why it eventually eclipsed the newly founded town of Assur-iqisa in the later part of the Neo-Assyrian Period.

The reasons behind the incorporation of the Cizre-Silopi plain as a Neo-Assyrian province in the 8th century are not difficult to fathom. Only 100 km upstream of Nineveh, the Cizre-Silopi area was strategically situated at the head of known routes towards Assyrian provinces in the west and northwest (via Nisibis/Nusaybin) and, moreover, towards Urartu and the north (Kessler 1980). By incorporating the area and resettling it with uprooted populations whose well-being and security depended entirely on the Assyrian administrators, the Assyrians were protecting their frontier against Urartian invasion from the north (Oded 1979). In fact, Tiglath-pileser III, the king who incorporated the Cizre-Silopi area into the Assyrian Empire, refers in his annals to the presence of Urartian fortresses in Ulluba, which may explain why he annexed the area once and for all (Tadmor 1994). Such fortresses would have likely been established during the lull in Assyrian power between the end of the reign of Shalmaneser III (824 B.C.) and the beginning of Tiglath-pileser III's (745 B.C. [Parker 2001]). Be that as it may, the total lack of red-burnish pottery characteristic for the Urartian sphere of influence in our survey collections suggests that the Urartian garrisons referred to in the texts would likely have been situated in hill-top locations well north and northeast of the area covered by our survey.

Our data from the Cizre-Silopi plain also bears on another recurring aspect of Neo-Assyrian imperial policy. Once the military stability of an area was established, the process of the consolidation of that area was one of "agricultural colonization," which included the founding of new rural villages and the settling of people deported from various parts of the empire for the purpose of agricultural production (Liverani 1988; Oded 1979; Parker 2001; Parker 1997b; Postgate 1974). Our results appear fully congruent with this policy. Earlier we had noted that the two defining characteristics of the Late Assyrian Period in the Cizre-Silopi plain were the doubling of the population density and the large number of new centers and villages that were newly founded at the time (59%). Many of these new foundations may have housed the deportees who we know were resettled into the region – a proposition that can and should be empirically tested by future excavations in the Cizre-Silopi area.

Although the Assyrian heartland is a fertile region that lies within the limits of rain-fed agricultural lands in northern Iraq, David Oates (1968: 45) many years ago already insightfully noted that population densities in the large Neo-Assyrian centers "...exceeded the local resources of the agricultural land by a substantial margin." The site of Nineveh, for instance, grew in the later part of the Neo-Assyrian Period to the

unprecedented size of 700 ha (Stronach 1994) – an extent five to six times larger than that of any settlement in Upper Mesopotamia until that time. If Oates was correct, as we suspect is the case, then the importance of the Cizre-Silopi plain to the Assyrians may have gone beyond its role as a strategic border and buffer zone. Given the inherent constraints of overland transportation using pack animals across Upper Mesopotamia, the Cizre-Silopi plain must have appeared as a particularly productive and accessible area from which to draw revenues and agricultural commodities needed by the ever more densely populated Assyrian cities in northern Iraq. In order to minimize the costs of supplying such cities, river transport of high bulk products such as grain would have been most economical. Since the Cizre-Silopi plain lies only about 100 kilometers north of the Assyrian heartland and is connected to it by the Tigris river, it is logical to assume that harnessing its agricultural potential figured prominently in structuring the course of Assyrian policy towards it.

Period 10: Post-Assyrian (6th-4th Centuries B.C.)

Material Culture and Chronology

Earlier we noted the impossibility of precisely separating on the basis of unstratified materials the Neo-Assyrian Period assemblages from those that immediately succeeded the collapse of the Assyrian Empire at the end of the 7th century B.C. There are, however, a small number of types in our collections that can perhaps be assigned to the later centuries intervening between the Assyrian collapse and the Hellenistic dynasties, when the Cizre-Silopi plain would have been part of the Achaemenid Empire. Two types are particularly salient: carinated bowls with club rims that are not much different from comparable Late Assyrian types but have an otherwise atypical impressed raised band at the carination point (Fig. 26: 10-11) and hole-mouthed jars with elaborately ridged rims, sometimes with impressed triangles on their shoulders (Fig. 26: 12-13), a type of decoration that starts in the Achaemenid Period but that continued into the Hellenistic Age (Wilkinson and Tucker 1995: 103).

These types are not being assigned to the Post-Assyrian Period on the basis of precise parallels to well dated assemblages elsewhere. Rather, they are assigned to that time range because in the Cizre-Silopi area they are generally found in sites with either Late Assyrian or Hellenistic/Parthian pottery in spite of the fact that neither type is reported in closely dated Neo-Assyrian or Hellenistic assemblages elsewhere. These are flimsy grounds to identify an intervening chronological slot, and the observed pattern could well be explained in terms of regional rather than chronological variation. However, at least one of the types in question, the hole-mouthed jars with ridged rims, appears to have been distributed well beyond the Cizre-Silopi area; it was reported from the north Jazira area of Iraq, where Wilkinson and Tucker (1995: Fig. 74: 6-8) also assigned it to a “Post-Assyrian” time frame. In any event, enough uncertainty remains that all attributions to “Post-Assyrian” occupations in this report are identified with a question mark. Readers who would prefer a less speculative reading of the evidence should lump all such sites into the Iron Age/Late Assyrian column.

Settlement Pattern and interpretation

Only a handful of sites with “Post-Assyrian” remains were identified. This represents a very substantial decline in the number of occupied sites in the area, which presumably went from being an intensively exploited core agricultural area under Neo-Assyrian control to a relatively marginal rural domain in Achaemenid times.

Periods 11-12: Hellenistic/Parthian (Ca. 330 B.C.-A.D. 250)

The next periods that can be distinguished in our collections are the Hellenistic and Parthian Periods. While assemblages of the two periods can be distinguished chronologically, important continuities do exist in their ceramics that make survey site attributions difficult. This is the case, particularly, with simple grit-tempered jar forms of the two periods. Additionally, considerable overlap in the use of specialized wares of each period may have also existed at the first century B.C. political transition point, with specialized wares typical for each period such as Hellenistic red-brown slipped and Parthian grainy blue/green glazes used at the same time. In light of these ceramic continuities, we have assigned sites that only yielded Hellenistic red-brown slipped wares to the Hellenistic Period, sites that only yielded Parthian glazes or other rare Parthian types to the Parthian Period, and we have lumped together sites that yielded both assemblages or that were identified solely on the basis of common ware vessel types that exhibit considerable continuity.

Material Culture and Chronology: Hellenistic

The Hellenistic Age dates from the late fourth to the first centuries B.C., and the Cizre-Silopi region was under the nominal control of Seleucid kings based in Seleucia on the Tigris at the time. The period is most easily distinguished by its finer wares, typically incurved rim hemispherical bowls with or without an interior-exterior fine red or brown-slipped band, a feature that finds parallels across multiple sites in the Hellenistic Period (Fig. 27: 1, compare Dorna-Metzger 1996: 372-373: 4, 5, 11). Another typical form in our collections is the so-called “fishplate,” which is equally widely distributed across the Hellenistic Near East. Typically, these are shallow platters with a variety of rims (Fig. 27: 3, 9, compare Dorna-Metzger 1996: 373: 12, 15). This type also comes in plain and red-brown slipped variants. Fishplates appear to have been used for a long time within the Cizre-Silopi survey region, as some also bear the characteristic grainy blue/green glazes of the Parthian Period (below). Other shallow platters, commonly red-brown slipped, have sinuous sides and have a distinctive groove just below the rim (Fig. 27: 5) or near their bases (Fig. 27: 8). Also distinctive, but rare in our collections, are a handful of sherds belonging to well-made, elaborately decorated globular bowls fired to produce a brown or red surface, which are possibly local imitations of Megarian Ware (Figs. 14: 10, 16 and 27: 7, 10).

Less easily recognized in our collections are undecorated Hellenistic Period vessels. Impressed rows of triangles on jar shoulders are occasionally found (Fig. 27: 14, compare Wilkinson and Tucker 1995: Pl. 75: 15, 16). One type that appears common is jars with folded over rims (Fig. 27: 19-20, compare Wilkinson and Tucker 1995: Pl. 75: 5,

6) but, like the platters noted earlier, this type also appears to continue into the Parthian Period.

Material Culture and Chronology: Parthian

As noted earlier, the Parthian Period is most readily recognized in our collections by the use of a typically grainy, metallic, pale green or blue-green glaze, found most commonly on fragments of ring-based bowls (Figs. 14: 13, 23 and 27: 15). Rarely, we also noted sherds with small impressed rosettes (Fig. 27: 17). Jars with folded over rims continue from the preceding period (Fig. 27: 19-20) but jars with outflaring grooved rims (Fig. 27: 18) that are widely paralleled at Parthian sites elsewhere (references in Wilkinson and Tucker 1995: 104) proved useful indicators for the period.

Settlement Pattern: Hellenistic/Parthian

Nineteen sites are assignable to the Hellenistic Period in the Cizre Dam and Cizre-Silopi plain areas; eight, possibly nine, were assignable to the Parthian Period; and three could only be assigned to the broader Hellenistic/Parthian category. Among sites assignable to either the Hellenistic or Parthian periods, there seems to have been little continuity. About half of the Parthian sites had been occupied in Hellenistic times, but only 20% or so (four out of nineteen) of Hellenistic sites continued into the Parthian Period.

Except, perhaps, for Basorin, all sites in the plain were villages in the Hellenistic and Parthian periods. The situation at Basorin cannot be clarified without further research. Isolated Hellenistic pottery was recovered in one quadrant of the site and isolated Hellenistic/Parthian types were recovered in two further quadrants, suggesting a sizable occupation, but we are dealing with at most a handful of sherds and there is no guarantee that they are contemporary. We are reluctant to say much about Basorin at this time on the basis of such ambiguous data. It is hoped that a more thorough survey of the site will in the future resolve this ambiguity.

In short, then, there is no compelling evidence that the Cizre-Silopi plain constituted anything other than an undifferentiated rural landscape in the Hellenistic and Parthian periods. The center of settlement in the area was then located at the substantial fortress town of Pinaka, directly on the banks of the Tigris north of Cizre, discussed in the following section.

Period 13: Late Roman (4th Century A.D.)

Material Culture, Chronology, and Interpretation

Within the Cizre Dam and Cizre-Silopi area, only four sites yielded pottery assignable to the Late Roman Period, which could be distinguished by ribbed, brittle cooking pot ware and by amphorae handles with three characteristic grooves (Fig. 28: 1-2). The paucity of Roman sites in the area is likely explained by the fact that the region was a contested border between the Sasanians and the Romans. In fact, two out of the four sites are substantial Late Roman structures and fortifications that manned that border.

These were discovered by the banks of the Tigris, just north of Cizre, and are discussed in detail in the next section.

Periods 14-15-16: Sasanian-Early Islamic (ca. 6-9th Centuries A.D.); Middle Islamic (ca. 10-15th Centuries A.D.); Ottoman (ca. 16th-19th Centuries A.D.)

Material Culture, Chronology, and Interpretation

As noted earlier, lack of expertise prevents a full analysis of the Islamic materials recovered in the survey. Accordingly, in this report we roughly divide our Islamic materials into three broad inclusive phases, each of which undoubtedly conflates several discrete periods.

Twenty-one sites were assigned to the earliest phase, the Sasanian/Early Islamic Period (Appendix 1: Period 14). There is no evidence for substantial sites of this period within the survey area. On the basis of small, presumably single period occupations, Sasanian/Early Islamic sites are generally marked by pale buff, or greenish-buff wares and commonly yielded few glazed sherds. Decoration, when present, mostly consists of simple wavy band combing (Fig. 28: 2, 8) or comb and slash decoration (Fig. 28: 12, 16). Frequently found in association are light, generally thin sherds of a distinctive pale greenish buff clay with relief molded decoration in complex geometric motifs (Fig. 28: 7). These are almost certainly imported. Stamp seal impressions on jar shoulders, of which we had a handful, are almost certainly Sasanian in date (Fig. 28: 6).

Twenty-two sites were assigned to the Middle Islamic Phase (Appendix 1: Period 15). With one exception, all of these sites are relatively small occupations. The exception was Near Başköy # 3, a low mound just over 9 ha in extent. On the basis of single period sites, the typical Middle Islamic assemblage appears characterized by buff or greenish buff sandy wares. As before, decoration includes wavy band combing (Fig. 29: 5, 6, 12), but the later examples of this technique usually combine this with other decorative techniques, including rouletting (Fig. 29: 5). Several types of glazes are associated with these materials, though they are not common. The earliest are sherds with sgraffito type decoration (Fig. 29: 8-9), usually greenish but more rarely yellowish brown, which are variously dated between the 11th and 13th centuries A.D. (Bartl 1994: 187; Wilkinson and Tucker 1995: 107). More rare are “black under turquoise” type glazes (Fig. 29: 7), which are paralleled in Medieval levels dating between the 13th and the 15th centuries A.D. at Ziyaret Tepe, near Bismil on the Upper Tigris (Vorderstrasse and Matney 2010).

Thirty-five sites were assigned to the Ottoman Period (Appendix 1: Period 16). There is no evidence for substantial settlements of this period within the survey area other than Cizre. Ottoman sites could be recognized by the presence of fragments of elaborately crafted tobacco clay pipes, which were frequent in our collections. Glazes, when present, are almost invariably simple and green.

HELLENISTIC/PARTHIAN AND LATE ROMAN REMAINS NORTH OF CIZRE

Without doubt, some of the most striking finds of the Cizre survey consisted of the remains of substantial fortifications and other structures of Parthian and Late Roman date lining the banks of the Tigris and Kızıl Su rivers just upstream of the modern town of Cizre. Because of the historical importance of these remains, some of their most salient points are discussed separately here. More detailed information is provided in the Site Catalogue (Appendix 1).

Bezabde/Phaenicha

Situated some 13 km directly upstream of Cizre, these Tigris ruins represent a major Late Roman military installation along the Tigris *Limes*, an installation founded directly over and opposite an earlier and equally substantial Hellenistic/Parthian fortification and settlement. The remains on the eastern side of the river, near the modern village of Damlarya (Fenik, Eski Yapı) had been noted and partly described by some 19th and early 20th century travelers (e.g., Bell 1924; Layard 1853), who identified them with Pinaka, one of three cities in Corduene mentioned by Strabo (*Geography*, 16.1.24) in the first century A.D., who notes that the city was “a very strong fortress with three citadels.”

Strabo’s description appears to have been right on target, because the ruins we explored consist of a number of massive structures and forts built on successive terraces overlooking the east side of Tigris at either side of a substantial spring-fed stream draining the neighboring Cudi Dağ. On nearby peaks at either side of the steep ravine created by the stream were several hilltop forts of various sizes, which must have controlled the view around the settlement for miles (Fig. 9: Fenik 5, 6, 8). Numerous rock-cut tombs and dwellings (Fenik 9) were cut into the sides of the ravine created by the stream. Nearby, on a track from the Tigris valley into the mountains was a now badly defaced relief that had been noted repeatedly by early travelers (Fig 9: Fenik 14). It depicts two standing figures in loosely fitting trousers with heavy folds, each with a raised hand (Algaze, 1989: Fig. 24), in a manner that is unmistakably Parthian in both composition and style (Nogaret 1984).

Of the massive forts noted earlier, none were more impressive than those built on the first broad terrace paralleling the river that was well above the range of possible flooding (i.e., the 400 m contour or thereabouts). On the west side of this terrace we observed the almost completely buried remains of what was perhaps one of the earlier fortresses at this location (Fig. 9: Fenik 2). Only a small corner (ca. 40 m ESE-WNW and 20 m NNW-SSE) of what was surely a much bigger building was visible. As far as we could see, the structure was roughly trapezoidal in shape and was built using large roughly coursed ashlar blocks. It was studded with massive, solid, rounded towers placed at about 20 m intervals (Fig. 10a). Because of thick overgrowth in the area of the structure at the time of our visit, no associated pottery was recovered.

A clearer and even more massive second fortress was located several hundred meters directly east of the preceding structure. This was a large fortress, roughly trapezoidal in shape with thick stone-built walls still standing several meters high (Fig. 9:

Fenik 3-4; Fig. 11). The external walls of the fortress could be traced over hundreds of meters, both along a contour parallel to the river and across contours perpendicular to it, the latter going directly upslope in the direction of one of the hill-top forts noted earlier (Fig. 9: Fenik 8). The structure's walls were studded with regularly spaced rectangular projections, serving as towers. An entrance gate existed on the structure's northeast side. While the date of this fortress cannot be ascertained without excavation, its final use can be dated to the Hellenistic/Parthian Period, since ceramics from its interior included fragments of characteristic Parthian blue/green glazed fish bowls and even several fragments of Hellenistic Megarian Ware (Fig. 14: 10-16).

By the Late Roman Period, when the Tigris became the border between the Roman and Sasanian empires, the Fenik remains were incorporated into an even larger Late Roman military complex that extended to the opposite (west) bank of the river as well. Evidence for this at Fenik itself is provided by architecture at the top of a low promontory that directly overlooks the Tigris just south of the stream (Fig. 9: Fenik 1). This architecture consisted of portions of two distinct but abutting buildings terraced down the natural slope of the promontory that could be traced over an area of 40-50 sq m (Fig. 10b). While too little of the plan was observable to guess at the function of the buildings, they are constructed in a way that betrays a Roman origin: their walls were built by means of alternating rows of stone blocks (mixed limestone and basalt) and thin baked bricks in a manner that is typical only of the Late Roman or Byzantine periods (Winfield and Foss 1986) and that is identical to the construction style used to erect the much larger Late Roman structures that our team found on the other side of the river, directly opposite Fenik.

Near the modern village of Hendek, on a natural rise overlooking the west bank of the river, our team documented an important Roman military installation along the Tigris *Limes*. Unlike the Fenik remains, the ruins at Hendek had escaped scholarly attention until the time of our visit. They consisted of a large, square castle (ca. 275 m per side) built on a bluff overlooking the Tigris with a double enclosure wall and rounded corner towers (Figs. 12a and 12b). The structure is oriented almost exactly to the cardinal points. On its eastern and southern sides, it is surrounded by a moat or fosse carved out of bedrock, which is 12 to 30 meters wide in places. Attached to the western side of the castle is a trapezoidal shaped structure with massive, regularly spaced, rounded towers, which is apparently a later addition to the original square structure. This addition creates a single coherent walled space almost half a kilometer long and 130 to 275 m wide.

At least one entrance flanked by solid towers that still stand several meters high could be discerned on the east side of the original square fortress just above the moat (Algaze 1989: Fig. 27). The construction technique of the fortress was clear in the towers, and consisted of alternating rows of ashlar blocks (made of both basalt and limestone) and thin (4.5-5 cm high, 24 cm wide) baked bricks (Algaze, 1989: Fig. 27) laid in bands three to four bricks thick.

Further extramural habitation areas also existed outside of the walled area just described. This is suggested by traces of numerous ruined walls just east of the fortress (Fig. 9: Hendek 1), including portions of a coherent square or rectangular building

(visible in the northeast portion of Fig. 12b) and of a sherd and baked brick scatter directly to the west of the trapezoidal fortress addition (Fig. 9: Hendek 2). In all, the remains indicate a substantial settlement at least 800 x 300 m in size (24 ha). Ceramics collected from within the fortress and from its immediately surrounding area are illustrated in Fig. 14: 1-9.

The date and nature of this complex appear clear. The square plan of the original structure is identical to Late Roman *Castella* attested elsewhere along the Roman *Limes* in western Asia (Lander 1984), even though it is an unusually large example of its genre. This dating is supported by the already discussed construction technique of the original square structure, which is typical for Late Roman/Byzantine architecture. More importantly, a Late Roman date is indicated by 45 coins collected by local villagers from the fields surrounding the Hendek fortress, which were turned over to Mr. Mehmet Söylemez, the government representative accompanying the survey team at the time of our visit. These coins were studied by Dr. Christopher Lightfoot, who notes that the majority fall in the time span between 312-360 A.D. (Söylemez and Lightfoot 1991).

Although much more research is needed, it is perhaps not too early to suggest that the Hendek ruins are those of the long-lost Roman fortress city of Bezabde/Phaenicha (Algaze 1989; Söylemez and Lightfoot 1991 and, more recently, Comfort 2009), which fell to the armies of the Sasanian king Shapur II in A.D. 360 (Ammianus Marcellinus, *Rerum gestarum*, 20.7.1; for a review of the literature on earlier attempts to locate Bezabde/Phaenicha, see Lightfoot 1983). This attribution is supported by a number of clues. First, the fourth century A.D. date suggested for the remains on the west side of the river matches closely what would be expected for Bezabde, captured in A.D. 360. Second, the location of the Hendek castle on a low hill overlooking the Tigris agrees with Ammianus Marcellinus' description of the fortress besieged by the Sasanians. Third, the plan and impressive size of the fortification are compatible with what could be expected for Bezabde, which is known to have been permanently garrisoned by a Roman legion and to have been manned by three legions at the time it was captured. A final clue is provided by the modern local name of the remains opposite the Hendek castle on the east bank of the river: Fenik. This name is a direct continuation not only of the Pinaka of Hellenistic documents but also of the Roman place name Phaenicha, which is used by Ammianus interchangeably with that of Bezabde to refer to the fortress city that fell to the Sasanians. The reason Ammianus could use both names interchangeably is clarified by the already noted Late Roman style architecture found in the Fenik area, which suggests that the Romans controlled both sides of the river in what, in their eyes, was but a single strategic location situated on their border with the Sasanian Empire. However, the presence of substantial Parthian fortifications in the east bank portion of the settlement (Fenik) indicates that the Roman military architects of the 4th century A.D. were hardly the first to recognize the strategic importance of the natural transition point where the Upper Mesopotamian plains meet the Tigris Gorge.

Kazrik Boğazi

Fenik was not the only strategic location that the Parthians thought worthy of holding north of Cizre. Some 9 km north of the modern town, not far from the confluence

of the Kızıl Su and the Tigris, our team examined a complex of features in the area of Kazrik Boğazı, a pass some 60 meters in width where the Kızıl Su cuts across the Cudi Dağ (Fig. 13). This pass is naturally strategic and, not surprisingly, there is much evidence of successive structures built to control it. The oldest such structures appear to be two stone fortresses perched on a ledge overlooking the Kızıl Su on its east side (Fig. 13: 5), which we did not visit. While we have no evidence for the date of these structures, it is possible that they may be associated with two well known Parthian reliefs described by early travelers (Layard 1853) on the opposite side of the pass, of which only one survives today. The surviving relief depicts a mounted warrior with a sword in his belt and his face turned towards the viewer (Algaze 1989: Fig. 24).

While the evidence just discussed is far from conclusive, the likelihood that the Parthians controlled the Kazrik Pass is buttressed by the discovery of a small nearby contemporary settlement situated just south of the pass at the point where the Kızıl Su opens into a wider plain (Fig. 13: 8). Traces of a girdling wall could be observed at the site (collected ceramics illustrated in Fig. 14: 17-23). This nearby plain was irrigated by a still partially preserved aqueduct cut into the rock cliffs by the river just under the Parthian site (Fig. 13: 1). There is little doubt that the settlement was placed at this location in connection to the pass, as the site was accessible by means of a paved road bordering the river (Algaze 1989: Fig. 22) that can still be traced along the length of the pass and that leads to a now ruined bridge over the Kızıl Su (Fig. 13: 7).

CONCLUDING REMARKS

While we are mindful of the fact that the Cizre-Silopi survey covered only a subset of a broader set of plains that extend into northeastern Syria and northern Iraq and that are still not fully unexplored, the survey did encompass a sizeable and geographically coherent portion of those plains (ca. 60 %) and is thus likely to be somewhat representative of conditions in the larger area. Additionally, our survey did sample an area of over 400 square km, which, methodological differences aside, allows for comparisons between its results and those of existing surveys of comparable scale elsewhere in the Upper Mesopotamian plains (conveniently summarized in Wilkinson 2000 and Ur 2010).

Be that as it may, until further survey work can take place in Syria and Iraq, the Cizre-Silopi area provides the only available body of archaeological data we have bearing on routes of communication and vectors of crosscultural interaction structuring the historical development of the northeasternmost portion of the Upper Mesopotamian plains in antiquity. From that perspective, the most salient point is that, prior to the Classical Age, interaction across the surveyed area appears to have been less focused on Anatolia to the north and more on the high plains of Iraq and Syria to the south and southwest. This orientation is not surprising in light of the substantial differences in the ease of communications southward as opposed to northward.

When we focus on southward interactions, a distinct millennial rhythm can be observed in the ebb and flow of relations between the Cizre-Silopi area and other areas of Upper Mesopotamia. The Ceramic Neolithic Period in the Cizre-Silopi area appears

largely local, but for the next millennium or so, in the Halaf Period, our region appears to develop in lock step with areas of Upper Mesopotamia. This starts to change in the fifth millennium B.C., when the Cizre-Silopi area fails to develop in tandem with areas immediately to the south and southwest and we observe instead the beginnings of an inverse developmental correlation between the Cizre-Silopi plains and parts of Upper Mesopotamia that will last for the better part of three millennia. This correlation is inferable from the fact that neither protourban polities such as those that developed in the Khabur Triangle of Syria in the Final Ubaid and Late Chalcolithic periods nor true cities such as those that emerged across the plains of Upper Mesopotamia in the Late Ninevite V and Mid-Late EBA periods are present in the Cizre-Silopi region. We would argue that the growth of complex polities elsewhere in Upper Mesopotamia took place in part at the expense of the Cizre-Silopi area by drawing local populations away and suppressing expected natural demographic increases. How else to explain the otherwise anomalous fact that the (settled) population density of the Cizre-Silopi region did not surpass the levels it had reached in Halaf times until the beginning of the second millennium B.C. (Fig. 4)?

The inverse developmental correlation reflected in our data was dramatically reversed in the second and first millennia B.C., when development in the Cizre-Silopi area became directly tied the fortunes of successive Assyrian realms. Settlement and population in the Cizre-Silopi area peaked when the Assyrians were expanding and fell when they were contracting. This should come as no surprise. While the Cizre-Silopi area does not have the productive potential of the more extensive plains to the south and southwest, given enough labor, the Cizre-Silopi plain is easily exploitable for reliable rain-fed cereal agriculture, and its crops were easily shipped to Assyrian cities directly downstream that were too large to be able to rely solely on their own hinterlands for their subsistence.

The close articulation (both direct and inverse) between the historical fortunes of the Cizre-Silopi area and Upper Mesopotamia that lasted for so many millennia effectively dissipated after the collapse of the Neo-Assyrian Empire, when the Cizre-Silopi area became a thinly inhabited backwater of far away empires whose agrarian production was focused elsewhere. Centuries later, population density increased somewhat with the onset of the Hellenistic Age, when our survey area became a rural hinterland almost certainly associated with an indigenous polity centered at Pinaka, on the Tigris north of Cizre. However, the fortunes of the region fell again in Late Roman times when imperatives of the military confrontation between Romans, Parthians, and Sasanians dictated the use of the Tigris gorge as a well delineated and easily defended border. Accordingly, by this time, there is little evidence of occupation in the nearby Cizre-Silopi plain, possibly because the region had become a contested “no-man’s” land between the warring parties at this time. After the contest was decisively decided in favor of the East, the Cizre-Silopi area again became a prosperous landscape of villages, this time as the hinterland of the important Medieval and Ottoman river-fording town of Cizre (Sinclair, 1989: 351-357).

Turning to less speculative matters, the results outlined above leave little doubt that important cultural information exists in the areas that will be directly affected by the Cizre Dam reservoir as well as in the Cizre-Silopi plain, where associated irrigation projects will be deployed. It is hoped that both of those areas will become the object of intensive archaeological research – possibly as part of international archaeological salvage efforts modeled on those so successfully conducted in Turkey in the Keban, Atatürk, and Ilisu Dam areas.

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APPENDIX 1: PERIODIZATION OF SURVEYED SITES

List of Periods

- | | |
|---|-------------------------------------|
| 1. Late Neolithic | 8. Late Bronze Age/Middle Assyrian |
| 2. Halaf | 9. Iron Age/Late Assyrian |
| 3. (Northern) Ubaid | 10. Post-Assyrian? |
| 3/4. Ubaid/Late Chalcolithic Transitional | 11. Hellenistic |
| 4a. Late Chalcolithic ('Amuq F) | 12. Parthian |
| 4b. Middle-Late (Middle-Late Uruk) | 11/12. Hellenistic/Parthian |
| 5. Ninevite V | 13. Late Roman (ca. 295-360 A.D.) |
| 5a. Ninevite V (painted) | 14. Sasanian/Early Islamic |
| 5b. Ninevite V (incised) | 15. Middle Islamic (Selçuk/Artukid) |
| 6. Mid-Late Third Millennium | 16. Ottoman |
| 7. Middle Bronze Age/Old Assyrian | 17. Period Unknown |

[illegible]

Site #	Site Name	PERIODS																							
		1a	1b	2	3	3/4	4a	4b	5	5a	5b	6	7	8	9	10	11	12	11/12	13	14	15	16	17	
29	Near Başköy #2				x									x							x				
30	Silopi Höyük				x				x			x	x	?	x	?							x		
31	Pituna Harabe														x							x			
32	Near Gündihadit #2																					x			
33	Near Gündihadit #1						x																	?	
34	Kopik Höyük													x	x										
35	Girge Miçuero			x	x							x			x		x		x				x		
36	Girge Barasta			x	x		x																		
37	Girik Tahti				x	x									x	?	x	x					x		
38	Girge Mera													x	x		x		x			x			
39	Near Girge Mera #1														x						x				
40	Gre Musto			x	x				x	x				x	x	?	x	x							
41	Girik Bedro									x					x		x						x		
42	Near Girik Bedro #1												x		x						x		x		
43	Near Girik Bedro #2																	x			x				
44	Near Girik Bedro #3															?					x				
45	Near Girik Bedro #4												x	x	x					x	x				
46	Nervan Höyük		x	x	x		x		x	x		x	x	x	x		x					x	x		
47	Near Nervan #1			x																					
48	Ali Huseynoğlu Höyük													x	x						x	x	x		
49	Takyan Höyük		x	x	x				x		x		x		x						x		x		
50	Near Takyan #1				x								x		x			x					x		
51	Near Takyan #2		x		x																	x	x		
52	Near Takyan #3				x		x						x		x										
53	Near Takyan #4																x				x				
54	Amarsava Höyük		x	x			x		x	x		x	x	x	x		x					x	x		
55	Near Amarsava #1	x																							
56	Gre Hazale												x	x	x		x				x	x	x		
57	Near Şurik Dere #3														x								x		
58	Near Şurik Dere #2																				x				
59	Near Şurik Dere #1														x						x				
60	Alişama Höyük												x	x	x	?							x		
61	Serebiye Harabe														x						x				
62	Kortik Höyük	x	x	x									x		x						x		x		
63	Hurisya Harabe														x		x					x	x		
64	Near Hurusya #1				x		x						x												
65	Kütnüz Höyük		x		x				x	x			x	x	x						x	x	x		
66	Girge Kavsi #1																				x				
67	Girge Kavsi #2																				x		x		
68	Cin Höyük													x										x	
69	Kerpiç Höyük				x										x										
70	Hazayi Höyük				x								x		x						x	x			
71	Pınarönü Harabe																								
72	Near Nerdüş Çay #1						x														x		x		
73	Medieval Bridge (Syria)																					?			
74	Toptepe																							x	
75	Near Girge Miçuero #1														x		x	x							

APPENDIX 2: SITE CATALOGUE

Site names given are those marked on 1: 25,000 maps or those revealed to us by local informants. In exceptional cases, unnamed or unmarked sites, largely small, are identified in relationship to nearby better-known sites. Such unnamed sites are then arbitrarily referred to as “Near Site X # 1, # 2,” etc. in our records.

Site measurements

With few exceptions, occupied area in sites was measured by pacing, and all measurements should, therefore, be considered approximate. Measurements given have a probable margin of error of plus or minus 10%. Site heights were measured with a hand-held level and probably have a similar margin of error.

Site elevations

Elevations noted are above sea level and are abstracted from 1: 25,000 maps. Elevations are given to the nearest 10 m contour at the base of the site. However, when a site is located between two fairly flat contours, the difference is divided in half. All elevations should then be considered to be accurate within plus or minus 10 m. Occasionally, however, some mounds had absolute elevation markers on their top. Those are noted, when observed.

Occupied Area

The estimates for total occupied area given for each site are those that could be reconstructed with confidence on the basis of our collections. Estimates for single period sites are of course self-evident. Additionally, relatively reliable period size estimates were possible for sites collected by morphological area when diagnostics for a specific period were distributed throughout one or more of the separately collected areas. In the case of sites collected by quadrants, the presence of period diagnostics in more than one contiguous quadrant, when it occurs, allows for rough estimates (in 25 % increments) of the size of the site in the period in question. Finally, in the case of multi-period sites for which it was not possible to accurately estimate the specific size of the various constituent occupations (i.e., those sites in which diagnostics for a specific period were so few and of such restricted spatial distribution so as to make it foolhardy to attempt an estimate of the size of the occupation in that period), we arbitrarily presumed a minimum occupied size of 0.5 ha for each period present in each distinct morphological area: in other words, an occupation no larger than a small village or hamlet – irrespective of its actual size. Admittedly, this low constant will result in significantly understated calculations for our reconstructions of total occupied area at any one time (Fig. 4). However, since this problem affects all periods equally, it should not alter our perception of changing demographic trends through time.

Cizre-Silopi sites

Site 1. Eski Hendek (Bezabde?)

Map: Figs. 3, 9; Satellite Photo: Fig. 12b; Plan: Fig. 12a. Pottery: Fig. 14.

Description: Roman Castellum and associated settlement; described in text.

Elevation at base: ca. 400 m.

Geomorphological Location: On terrace overlooking Tigris floodplain.

Location: Opposite Site 2, Fenik.

General comments: Until a generation ago, the modern village of Hendek was situated within the castle walls. River has eroded northern edge of site/architecture.

Artifactual comments: See Fig. 14: 1-9.

Periods Present: Periods 13, 16.

Minimum occupied area estimate: Period 13: 24 ha; Period 16: 0.5 ha.

Site 2. Fenik

Map: Figs. 3, 9. Plan: Figs. 10-12. Pottery: Fig. 14.

Fenik 1. Natural rise overlooking the Tigris floodplain. On a cut by the northern side of mound it could be observed that that archaeological deposits generally did not exceed 2 in depth, but portions were deeper up to 5 m. Fenik 1 had a complex occupational history, which went back at least to the Late Chalcolithic period on the basis of eroding ceramics. A retaining wall at the base of this rise built of cut basalt blocks was 1.5 m wide, 12 m long, 20 m high, and separated the rise from the nearby stream, protecting the structures on top (Fig. 10b; described in the text) from erosion.

Fenik 2. Portions of fortress with rounded towers (ca. 4 m in circumference) and walls (ca. 1.25-1.4 meters in width) made of heavy, roughly-coursed ashlar blocks laid back to back, forming both the inner and outer faces of the wall (Fig. 10 a). Of unknown date; described in text.

Fenik 3-4. Portions of fortress with recessed rectangular tower-like projections. East-west running wall was traceable for length of ca. 160 m. Wall running upslope roughly NNE-SSW was traceable for a distance of over 300 m. Walls are ca. 2.5 m in thickness, made of roughly shaped and coursed facing stones set in lime cement with coursed rubble core (Fig. 11). Of Parthian date; described in text. Ceramics illustrated in Fig. 14: 10-16.

Fenik 5. Hilltop structure. Not visited.

Fenik 6. Massive hilltop structure. Not visited.

Fenik 7. Traces of architecture. Period and nature unclear.

Fenik 8. Hilltop structure aligned with walls of the lower Parthian fortress (Fenik 3-4) and presumably associated with it. Not visited.

Fenik 9. Rock cut tombs or dwellings in ravine wall. Not visited.

Fenik 10-11. Terrace with extensive traces of occupation of Islamic date (Fenik 10). However, neither the extent nor the depth of the occupation could be ascertained as the area was under wet rice cultivation at the time of our visit. On the northwestern part of the terrace were the remains of a still partly standing stone structure 27 meters in length and 10 meters in width with at least three chambers (Fenik 11). This structure served as mosque since its middle chamber had a square *mehrab*, facing south. Beyond the mosque was a rectangular mausoleum (*türbe*), which measured

ca. 3.5 x 4 m. The *türbe* had a partially preserved domed roof with interior flutes.

Fenik 12. Rock cut tombs or dwellings in ravine wall. Not visited.

Fenik 13. Retaining wall built of large uncut boulders that could be traced over a non-contiguous length of 22 m or so and had been partially uncovered by a recent bulldozer cut, almost certainly part of a similarly aligned retaining wall in Fenik 1, noted earlier. It probably served to prevent erosion from Tigris flooding. Eroding, possibly associated ceramics appeared to be of Hellenistic date and included several typical bowls with incurved walls.

Fenik 14. Parthian Relief. Described in text; illustrated in Algaze 1989: Fig. 26. Relief appears to have been defaced sometime between the visit of Henry Layard (1853) in the middle of the 19th century and Gertrude Bell (1924) early in the 20th century.

Site 3. Kazrik Boğazı

Map: Figs. 3 and 13. Pottery: Fig. 14. Described in text.

Kazrik 1. Aqueduct carved into rock bringing water from Kızıl Su to the Kazrik 8 settlement and possibly used to irrigate the plain below it.

Kazrik 2. Road alongside Kızıl Su river, paved with boulders (Algaze 1989: Fig. 22).

Kazrik 4. Traces of a small fortress with arched doorways using natural rock as walls. Associated ceramics are Ottoman. Presumably this is the Ottoman fortress guarding the Kazrik Pass observed by Henry Layard (1853: 46) in the 1850's.

Kazrik 5. Traces of two other, possibly earlier (Parthian), stone fortresses that once guarded the Kazrik Pass. Built between vertical veins of natural stone on sides of the pass. Not visited.

Kazrik 6. Man-made dugout carved into rock just north of Kazrik 5 fortresses. Situated about 20 meters above the level of the river.

Kazrik 7. Isolated piers, remnants of two bridges over the Kızıl Su.

Kazrik 8. Settlement of Hellenistic-Parthian date. About. 2.6 ha in extent (220 [E-W] x [120 [N-S]]. Traces of a girdling wall around it. Ceramics illustrated in Fig. 14: 17-22.

Kazrik 9-10. Isolated wall alignments upslope from Kazrik 8 settlement. Possibly related to it but no associated pottery. Agricultural terracing?

Kazrik 11. Rock cut tomb/dwelling. Two rooms visible, ca. 30 meters above Kızıl Su. Not visited.

Kazrik 12. Man-made chamber cut into rock. Directly over road. Not visited.

Kazrik 13. Parthian relief depicting equestrian figure (Algae 1989: fig. 24). Ca. 10 meters above the present level of the Kızıl Su.

Kazrik 14. Isolated rounded structure on rock cliff directly upslope of the Kazrik 5 fortresses. Not visited.

Kazrik 15. Area of terraced walls and wall alignments. Period uncertain.

Kazrik 16. Wall alignments. Period uncertain

Kazrik 17. Islamic (Selçuk?) pointed-arch bridge (Algae 1989: Fig. 23).

Site 4. Bürücek Bridges

Map: Fig. 3.

Remnants of two separate bridges on the same location over the Kızıl Su river. Fragments of at least four separate, partly collapsed piers placed at about 5 meter intervals are visible on the easternmost of the two bridges. Piers are squarish and each has a triangular projection facing the flow of water. Each is built with a cemented rubble core faced with cut stone. If one presumes the bridges are related to the Parthian settlement and relief nearby (Site 3, above) they probably date to the Parthian Period.

Site 5. Şeyh Mohammed Harabe

Map: Fig. 3.

Description: Oblong, fairly flat scatter.

Dimensions: Length: 200 m (E-W); Width: 75 m (N-S); Area: 1.5 ha; Height: ca. 0 m.

Elevation at base: ca. 385 m.

Geomorphological Location: In the middle of a gentle alluvial slope by the side of dry wash, ca. 800 m west of Tigris.

Location: about 1 km east of Zerizeri village. Site is situated on Tigris opposite its confluence with the Kızıl Su.

General comments: numerous wall alignments built with basalt boulders on site surface. Traces of associated cemetery nearby.

Periods Present: 15.

Minimum occupied area estimate: Period 15: 1.5 ha.

Site 6. Ayn Şeş Harabe.

Map: Fig. 3.

Description: Very low mound/rise cut into two portions by modern Cizre to Şırnak road.

Dimensions: Southern portion, Length: 100 m (E-W); Width 50 m (N-S); Northern portion, Length: 50 m (E-W); Width 20 m (N-S); Area: 0.6 ha; Height: ca. 1 m at most.

Elevation at base: ca. 380 m.

Geomorphological Location: On a low Pleistocene terrace underlain by conglomerate and overlooking the Tigris.

Location: ca. 2.0 km upstream of Cizre, along the Tigris.

General comments: Almost certainly associated with Kidisu Harabe, below.

Artifactual comments: Mostly small, single period Middle Islamic site. Middle Islamic sherds found in both portions of site. Isolated Middle and Late Assyrian sherds found only in southern portion.

Collection: either side of road collected separately.

Periods Present: Period 8, 9, 15.

Minimum occupied area estimate: Periods 8, 9: 0.5 ha each; Period 15: 0.6 ha.

Site 7. Kidisu Harabe

Map: Fig. 3.

Description: Low rounded mound.

Dimensions: Diameter 35 m; Area: 0.1 ha; Height: ca. 0.5-1 m.

Elevation at base: ca. 380 m.

Geomorphological Location: On a low Pleistocene terrace underlain by conglomerate and overlooking the Tigris. Several springs just west of the site.

Location: ca. 2.0 km upstream of Cizre, along the Tigris.

Collection: Single unit.

General comments: Bits and pieces of walls visible on surface. Probably the remains of a single building associated with nearby settlement (Site 6: Ayn Şeş).

Periods Present: Period 15.

Minimum occupied area estimate: Period 15: 0.1 ha.

Site 8. Cizre Mezarı

Map: Fig. 3.

Location: within modern Cizre.

General comments: Ceramics collected from discarded heap piles near cemetery.

Periods Present: Periods 15-16.

Site 9. Mehmetçik Höyük

Map: Fig. 3; Plan: Fig. 8d.

Description: Conical mound and associated terrace.

Dimensions: High Mound, Diameter: High mound and Terrace: Length: 200 (N-S) m; Width: 140 m (E-W); Area: 2.8 ha; Height: ca. 17 m.

Elevation at base: ca. 385 m.

Geomorphological Location: On SW edge of low Pleistocene terrace underlain by conglomerate. Site overlooks a slightly incised perennial to the NW and the Tigris floodplain to the S.

Location: About 2 km SE of Cizre, along the Cizre-Silopi road.

General comments: Mehmetçik is aligned with the remains of a Medieval Bridge (Site 73) visible on the Syrian side of the Tigris, and probably served as an anchor to that bridge on the eastern bank of the river.

Collection: East spur/terrace, top of high mound, slopes of high mound, river-side cut, general collection.

Artifactual comments: While early materials are found throughout, the bulk of those materials come from the river-side cut, which exposed early levels. The east spur/terrace had Periods 3, 4a (including beveled rim bowls), 7, 15, 16; The high mound had Periods 3, 3/4, 4a, 5, 6, 7, 9, 12, 11/12, 15, 16 and the general collection of the mound added Period 8.

Periods Present: 3, 3/4, 4a, 5, 5a, 6, 7, 8, 9, 11/12, 12, 15, 16.

Minimum occupied area estimate: Periods 3, 3/4, 4a, 5, 5a, 6, 7, 8, 9, 11/12, 12, 15, 16: 0.5 ha each.

Site 10. Hacı Sultan (İnce) Höyük

Map: Fig. 3.

Description: Conical mound.

Dimensions: Preserved Length: 25 m (E-W); Width: 40 m (N-S); Preserved Area: 0.1 ha; Height: ca. 5 m.

Elevation at base: ca. 370 m.

Geomorphological Location: At edge of a low Holocene and possibly Late Pleistocene terrace overlooking the Tigris Floodplain.

Location: Just east of Mehmedi (İnce) Village.

General comments: large portions of site have been eroded by a nearby dere, leaving a steep section on the west of site. Remaining portions of the mound have an Islamic cemetery over most of it.

Collection: West section as single unit.

Periods Present: 3, 4a, 5, 5b, 8.

Minimum occupied area estimate: Periods 3, 4a, 5, 5b, 8: 0.5 ha each.

Site 11. Yas Höyük (Gre Siro)

Map: Fig. 3.

Description: Conical mound.

Dimensions: Length: 55 m (N-S); Width: 40 m (E-W); Area: 0.22 ha; Height: ca. 6 m.

Elevation at base: ca. 360 m.

Geomorphological Location: On a narrow terrace of Holocene and possibly Late Pleistocene age overlooking the Tigris floodplain.

Location: About 50 m west of the Cizre-Silopi road and about 2.8 km west of the confluence of the Nerdüş Çay and the Tigris.

General comments: Site was completely covered in weeds and produced only isolated, non-diagnostic body sherds. Period(s) of occupation unknown.

Site 12. Revini Harabe

Map: Fig. 3.

Description: Irregular mound

Dimensions: Length: 160 m (N-S); Width: 100 m (E-W); Area: 1.6 ha; Height: ca. variable, 2 m max.

Elevation at base: ca. 370 m.

Geomorphological Location: On a low promontory, probably a Pleistocene terrace underlain by conglomerate. Site is at the confluence of Nerdüş Çay and Tigris.

Location: About 1 km due east of Revini Village.

General comments: Size given is that of original site. At present that extent is cut by a ca. 75 m wide gap created by modern Cizre to Silopi road. Ruins of what appears to be a large, heavily pitted, building on top.

Collection: north and south remnants of site at either side of road collected separately.

Artifactual comments: One piece of Sprig ware.

Periods Present (south): 3/4, 4a, 5, 7, 15.

Periods Present (north): 4a, 15

Minimum occupied area estimates: Periods: 3/4, 5, 7, 9: 0.5 ha; 4a, 15: 1 ha.

Site 13. Rubaikale

Map: Fig. 3.

Description: Elongated settlement.

Dimensions: Length: 220 m (N-S); Width: 80 m (E-W); Area: 1.76 ha; Height: ca. 8 m of occupation visible over conglomerate.

Elevation at top: 389 m.

Geomorphological Location: On high bedrock knob of conglomerate at the confluence of the Yüzükara Dere and Altadıöldü Dere, overlooking the Tigris.

Location: About 700 m due north of Rubai (Kavaközü) Village.

General comments: A ruined Ottoman fort on Rubaikale was noted by a traveler in 1888 (British Admiralty, Naval Intelligence Division Division 1917: 237). Still visible, the fort is trapezoidal in shape and has rows of rooms that are still traceable over ca. 30 m (E-W) and 18 m (N-S). Traces of a large cistern (?) also visible. Traces of one or more earlier forts, presumably also Ottoman in date, are visible on the northernmost and southernmost promontories of the knob. On account of its height, Rubaikale commands the routes between Mosul and Cizre, which, as noted earlier, skirt its base and cross the (eastern) Khabur river just downstream of the site.

Periods Present: 3, 4a, 4b, 5, 5a, 5b, 6, 7, 16.

Minimum occupied area estimates: 3, 4a, 4b, 5, 5a, 5b, 6, 7: 0.5 ha each; Period 16: 1.76 ha.

Site 14. Near Rubaikale # 1.

Map: Fig. 3.

Description: flat scatter

Dimensions: Length: 90 m; Width: 45 m; Area: ha; Height: ca. 0.5 m.

Elevation at base: ca. 390 m.

Geomorphological Location: On south end of a natural bench underlain by conglomerate cut by Yüzükara Dere and Atladıöldü Dere.

Location: about 400 m NNE of Rubaikale.

General comments: A few wall alignments visible on surface.

Collection: Single unit.

Periods Present: 9, 11, 14.

Minimum occupied area estimates: Periods 9, 11, 14: 0.5 ha each

Site 15. Eski Rubai Köy

Map: Fig. 3.

Description: irregular mound

Dimensions: Length: 220 m (N-S); Width: 120 m (E-W); Area: 2.64 ha; Height: ca. 4-9 m (but it is unclear how much of that is natural).

Elevation at base: ca. 350 m.

Geomorphological Location: On a low terrace remnant underlain by conglomerate, probably of Pleistocene origin, overlooking the Tigris to the west.

Location: By Kavaközü Village.

General comments: Bulldozer cut in NE of site reveals ca. 2 m of deposition. Site appears to have been built along slopes of natural terrace. Many wall alignments visible. Wall foundations made of small and medium-sized river boulders held in place by lime plaster. Villagers at Kavaközü confirmed that this was the location of their previous village, ca. 80 years ago.

Collection: Single unit.

Periods Present: 16.

Minimum occupied area estimate: 2.64.

Site 16. Basorin Höyük

Map: Fig. 3; Plan: Fig. 8b.

Description: Conical mound at one end of a much more massive, extended lower terrace.

Dimensions: High mound: Diameter: 125 m; High mound plus terrace: Length: 380 m (N-S); Width: 280 m (E-W); Area: 10.6 ha; Height: high mound, ca. 27 m (over conglomerate), terrace: ca. 16 m.

Elevation at base and top: ca. 350 m and 377 m, respectively.

Geomorphological Location: On a bedrock knob underlain by conglomerate, the remnant of a low Pleistocene terrace overlooking the floodplain of the Tigris, which is directly south and southwest of the site. Along Şurik Dere, which is just east of site.

Location: On the east side of Basorin village.

General comments: Massive standing architecture of Late Roman/Byzantine/Medieval date occupying an area on the center and north portions of the site terrace just at the foot the high mound. Architecture is extensive and shows several construction techniques and reconstruction phases, suggesting a palimpsest of periods. Thin baked bricks set in scoria suggest a Late Roman or Byzantine date for the initial construction of the remains, which were almost certainly reused through Islamic times. Extensive piping in walls suggests perhaps some sort of a bath complex? No diagnostic pottery was found in direct association with these structures, but two roof tiles were noted.

Collection: Slopes of high mound; terrace top, terrace slopes, by quadrants.

Artifactual comments: South side of high mound shows some river erosion revealing the earliest levels, including Halaf, Ubaid and Late Chalcolithic/Uruk. Numerous soil pits dug by local villagers against the south and west slopes of the terrace provided large, and possibly representative, samples of pottery from the site.

Periods Present: Periods: 1b, 2 (2 quadrants), 3 (2 quadrants), 4a (1 quadrant), 4b (1 quadrant), 5a-b (2 quadrants), 6 (3 quadrants), 7 (4 quadrants), 8 (4 quadrants), 9 (3 quadrants, plus terrace top), 11 (1 quadrant), 11-12 (2 quadrants), 13 (high mound, terrace top?), 15, 16.

Minimum occupied area estimate: Periods 1b, 2, 3, 4a-b and 11, 15, and 16: 0.5 ha each; Period 5a-b: 5.3 ha; Period 6: 8 ha; Periods 7-8: 10.6 ha; Period 9: 8 ha; Periods 11-12: 5.3 ha; and Period 13: ca. 6 ha? (high mound plus top of terrace with architecture).

Site 17. Şeyh Mehmet Türbesi Harabe

Map: Fig. 3.

Description: Elongated mound.

Dimensions: Length: 100 m (N-S); Width: 60 m (E-W); Area: 0.6 ha; Height: ca. 4 m.

Elevation at base: ca. 350 m.

Geomorphological Location: Same as site 16, above.

Location: On natural ridge, just south of Basorin Höyük.

General comments: Modern mausoleum (türbe) and associated cemetery on top.

Periods Present: 3, 7, 16.

Minimum occupied area estimates: Periods 3, 7, 16: 0.5 ha each.

Site 18. Yankale Höyük

Map: Fig. 3.

Description: Elongated shell-shaped mound.

Dimensions: Length: 250 m (E-W); Width: 100 m (N-S); Area: 2.5 ha; Height: ca. 2 (SE) to 4.5 m (NW).

Elevation at base: ca. 340 m.

Geomorphological Location: On SW edge of a low terrace of probable Late Pleistocene Age. Underlain by conglomerate. Overlooks Tigris floodplain.

Location: Yankale village ca. 100 m east of mound.

General comments: South end of mound cut by road.

Periods Present: 4a, 5, 8, 9, 16.

Minimum occupied area estimate: Periods 4a, 5, 8, 9, 16: 0.5 ha each.

Site 19. Near Korova # 2

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Length: 80 m (N-S); Width: 120 m (E-W); Area 0.96 ha; Height: ca. 1.5-2 m.

Elevation at base: ca. 350 m.

Geomorphological Location: On crest of a ridge of conglomerate bedrock overlooking the Khabur Su floodplain. Springs just west of site.

Location: About 3.7 km due west of Ovaköy (Korova) Village.

Collection: Single unit.

Periods Present: 7, 9, 10 (?).

Minimum occupied area estimate: Periods 7, 9: 0.5 ha each.

Site 20. Near Korova # 1

Map: Fig. 3.

Description: Small conical mound on natural ridge with a fringe of associated settlement on separate lower terrace.

Dimensions: Length: High Mound: 110 (E-W) m; Width: 50 m; Lower Terrace: 100 (E-W) x 25 m (N-S) Total Area: 0.8 ha; Height: ca. 6.5 m.

Elevation at base: ca. 380 m.

Geomorphological Location: On crest of a ridge of conglomerate bedrock overlooking the Khabur Su floodplain. Site also extends over a lower Holocene terrace.

Location: About 1.4 km due W of Ovaköy (Korova) Village.

Collection: Single unit.

Periods Present: 7, 9, 11, 14.

Minimum occupied area estimates: Periods 7, 9, 11, 14: 0.5 ha each.

Site 21. Ilıcalar Höyük.

Map: Fig. 3.

Description: Irregular mound

Dimensions: Length: 340 m (E-W); Width: 160 m (N-S); Area: 5.4 ha; Height: ca. 1-6 m.

Elevation at base: 367 m; at top 373 m.

Geomorphological Location: On a low Pleistocene terrace overlaying conglomerate and overlooking the floodplain of the Khabur Su. Springs just south and under site.

Location: Partially under Ilıcalar (Hevintkan) Village.

General comments: Site appears to have two overlapping components: An eastern portion is ca. 120 x 160 m in extent and up to 6 m of archaeological deposits while a western portion is ca. 220 x 160 m in extent and has only between 1-2 m of deposits.

Collection: High mound, eastern portion, western portion.

Artifactual comments: Eastern portion has Periods 5, 7, and 8. Western portion has Periods 4a, 7, 8, 9, 10 (?). High mound has Period 7.

Periods Present: Periods 4a, 5, 7, 8, 9.

Minimum occupied area estimate: Period 4a: 0.5 ha, 5: 0.5 ha, 7: 5.4 ha, 8: 5.4 ha, 9: 0.5 ha.

Site 22 Zeyideba Harabe

Map: Fig. 3.

Description: Settlement on top of natural rise.

Dimensions: Length: 120 m (E-W); Width: 100 m (N-S); Area: 1.2 ha; Height: ca. 2 m.

Elevation at base: ca. 375 m.

Geomorphological Location: At south edge of low terrace of probable Late Pleistocene Age overlooking the floodplain of the Khabur Su.

Location: About 1.7 km ENE of Ilıcalar Village.

General comments: Traces of small-roomed architecture on south portion of site. Traces of ca. 0.80 meter-thick wall on north and west portion of site, possibly a girdling wall?

Collection: Single unit.

Periods Present: 14, 16.

Minimum occupied area estimates: 14, 16: 0.5 ha each.

Site 23. Bimrim (Dolan) Höyük

Map: Fig. 3.

Description: Conical mound surrounded by two distinct lower terraces. The first (lower) terrace extends across the full extent site, whereas the second (higher) terrace only extends west of the high mound.

Dimensions: Second Terrace: 310 m (SSE-NNW) x 75 m (NNE-SSW); High Mound plus terraces: Length: 310 m (SSE-NNW); Width: 270 m (NNE-SSW); Area: 8.37 ha; Height: ca. 14 m.

Elevation at base: ca. 390 m; Top: 402 m.

Geomorphological Location: On a low promontory, probably the remnant of a high Pleistocene

terrace, overlooking a broad, lower, Pleistocene terrace facing the (eastern) Khabur floodplain.

Location: Dolan Village ca. 100 m west of mound.

General comments: Site had not been plowed recently and produced relatively few sherds. Traces of walls, relatively recent, on the second terrace. Ottoman/recent cemetery on SE portion of first terrace.

Collection: First and second terraces collected separately.

Artifactual comments: Khabur ware and Late Assyrian diagnostics recorded across first terrace, equaling the full extent of the site. Middle Assyrian diagnostics and Ottoman diagnostics only found in smaller second terrace. A single recognizable Hellenistic sherd.

Periods Present: Periods 7, 8, 9, 11, 16.

Minimum occupied area estimate: 7 and 9: 8.37 ha. Periods 8, 11, 16: 0.5 ha.

Site 24. Aktepe Harabe

Map: Fig. 3.

Description: Occupation on top of a natural rise.

Dimensions: Length: 130 m (E-W); Width: 120 m (N-S); Area: 1.43 ha; Height: ca. 3-4 m max occupation towards the east, decreasing to 1-2 meters towards the west.

Elevation at base: (Not measured: off map)

Geomorphological Location: On top of conglomerate rise overlooking the Khabur Su.

Location: Under Aktepe Karakol.

General comments: Buildings on top.

Collection: single unit.

Periods Present: 4a, 7, 9, 16.

Minimum occupied area estimate: Periods 4a: 0.5 ha; 7: 0.5 ha; 9: 0.5 ha, 16: 0.5 ha.

Site 25. Near Başköy #3

Map: Fig. 3.

Description: Low, domed mound.

Dimensions: Length: 320 m (N-S); Width: 300 m (E-W); Area: 9.6 ha; Height: ca. 1.5-2 m.

Elevation at base: (Not measured: off map)

Geomorphological Location: On gently sloping alluvial fan. No visible source of water.

Location: About 5.5 km SW of Başköy (Tilkabin) village.

General comments: Large site or horizontal stratigraphy?

Collection: Single unit.

Periods Present: 15.

Minimum occupied area estimate: Period 15: 9.6 ha.

Site 26. Tilkabin Höyük.

Map: Fig. 3.

Description: Conical mound.

Dimensions: Length: 160 m (N-S); Width: 60 m (E-W); Area: 1 ha; Height: ca. 7.5 m.

Elevation at base: (Not measured: off map)

Geomorphological Location: On alluvial fan, by side of a now dry dere.

Location: About 2 km south of Başköy Village.

Collection: Single unit.

General comments: Severely cut by sand quarry operation just west of site. Whole top of mound paved (flattened?) as emplacement for an abandoned factory.

Periods Present: 7, 8, 9, 11, 16.

Minimum occupied area estimate: Periods 7, 8, 9, 11, 16: 0.5 ha each.

Site 27. Hasan Tartar Höyük

Map: Fig. 3.

Description: Low conical mound.

Dimensions: Length: 210 m (NE-SW); Width: 150 m (SE-NW); Area: 3.15 ha; Height: ca. 4 m.

Elevation at base: (Not measured: off map)

Geomorphological Location: On alluvial fan. No visible source of water.

Periods Present: Periods 7, 9, 11, 12.

Minimum occupied area estimate: Periods 7, 9, 11, 12: 0.5 ha each.

Site 28. Near Başköy # 1

Map: Fig. 3.

Description: Low, conical mound.

Dimensions: Main mound: Length: 140 (E-W) m; Width 105 (N-S). Main mound plus terrace: 240 m (E-W), 140 m (N-S); Area: 3.4 ha. Main mound height: ca. 5.5 m.

Elevation at base: (Not measured: off map)

Geomorphological Location: On gently sloping alluvial fan, by side of seasonal dere, just west of site.

Location: About 0.5 km north of Başköy (Tilkabin) village

General comments: Ruins of recent water mill on site.

Collection: Single unit.

Periods Present: Periods 3, 16.

Minimum occupied area estimate: Period 3: 3.4 ha; Period 16: 0.5 ha.

Site 29. Near Başköy # 2

Map: Fig. 3.

Description: Flat scatter.

Dimensions: Length: 150 m (N-S); Width: 90 m (E-W); Area: 1.35 ha; Height: ca. 0 m.

Elevation at base: (Not measured: off map)

Geomorphological Location: On gently sloping alluvial fan, by side of seasonal dere, just west of site.

Location: About 0.5 km north of Başköy (Tilkabin) village.

General comments: Probably associated with Ubaid site, Near Başköy # 1, above.

Collection: Single unit.

Artifactual comments: Very few sherds.

Periods Present: Periods 3, 8, 14.

Minimum occupied area estimate: Periods 3, 8, 14: 0.5 ha each.

Site 30. Silopi Höyük

Map: Fig. 3; Plan; Fig. 8c.

Description: Conical high mound with lower terrace towards the southeast.

Dimensions: High mound: Length: 160 m (E-W); Width: 120 m (N-S). Preserved portion of site (high mound plus terrace): 240 m (E-W); Width: 200 m (N-S); Preserved Area: 4.8 ha; Height (high mound): ca. 12 m; Height (lower terrace): ca. 6 m.

Elevation at base: ca. 510 m.

Geomorphological Location: Near the upper edge of a broad alluvial fan with bedrock hills to the north. By side of Girik Dere, a small spring fed perennial stream.

Location: Surrounded by modern Silopi.

General comments: High mound has been badly cut up by modern construction around its full circumference, exposing stratigraphy and architecture on the resulting profiles. Park constructed on mound top. Lower terrace lies largely underneath modern town and has been badly disturbed by it; both its extent and shape are unknowable. Cuts suggest that terrace towards SE may have as much as 6 m of archaeological deposits. One cut, ca. 30 m east of the base of the high mound, showed a two-meter thick wall built of large boulders.

Collection: High mound slopes, lower terrace.

Artifactual comments: Period 10 (?) defined on the basis of ridged, hole-mouthed vessel of type depicted on Fig. 26: 12-13. Terrace yielded few sherds because of modern disturbance. Diagnostics were overwhelmingly of Period 7 and 9 types.

Periods Present (high mound): 3, 5, 6, 7, 9, 10 (?), 11, 16.

Periods Present (lower terrace): 4a, 7, 8, 9.

Minimum occupied area estimate: 3, 4a, 5, 6, 8, 10 (?), 11, 16: 0.5 ha each; Periods 7, 9: ca. 4.8 ha each.

Site 31. Pituna Harabe

Map: Fig. 3.

Description: Low conical mound.

Dimensions: Length: 265 m (N-S); Width: 250 m (E-W); Area: 6.6 ha; Height: ca. 4 m (on west portion of site, much less towards east).

Elevation at base: ca. 450 m.

Geomorphological Location: On surface of gently sloping alluvial fan near incised dry wash. No obvious source of water at present.

Location: About 2 km NE of Ortaköy (Gündihadit) Village.

General comments: Islamic cemetery on top of site. Traces of ruined structure on east side of mound.

Periods Present: 9, 15.

Minimum occupied area estimate: Periods 9, 15: 0.5 ha each.

Site 32. Near Gündihadit # 2

Map: Fig. 3.

Description: Fairly flat settlement attached to ruins of a single, partly standing building.

Dimensions: Length: 120 m (N-S); Width: 90 m (E-W); Area: 1.1 ha; Height: ca. 1-1.5 m.

Elevation at base: ca. 455 m.

Geomorphological Location: On sloping surface of alluvial fan. No obvious source of water nearby.

Location: About 2 km NE of Ortaköy (Gündihadit) village.

General comments: A ruined single building on top with cemented field stones used as wall foundations. Preserved walls: 16 x 26 m in length.

Periods Present: 15.

Minimum occupied area estimate: Period 15: 1.1 ha.

Site 33. Near Gündihadit # 1

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Length: 215 m (N-S); Width: 185 m (E-W); Area: 4 ha; Height: ca. 3 m.

Elevation at base: ca. 445 m.

Geomorphological Location: On a slightly incised dry wash on surface of an alluvial fan.

Location: About 1.6 km ENE of Ortaköy (Gündihadit) village.

Artifactual comments: Largely a single period Late Chalcolithic (Period 4a) site. A handful of sherds may belong to another unknown period.

Collection: Single unit.

Periods Present: 4a.

Minimum occupied area estimate: Period 4a: 4 ha.

Site 34. Kopik Höyük

Map: Fig. 3.

Description: Low conical mound.

Dimensions: Length: 225 m (N-S); Width: 250 m (E-W); Area: 3.5 ha; Height: ca. 3.5 m.

Elevation at base: ca. 425 m.

Geomorphological Location: On the surface of a broad, gently sloping alluvial fan.

Location: About 2.5 km SE of Ortaköy (Gündihadit) Village.

Collection: Single unit.

Artifactual comments: Egyptian made faience figurine of Isis holding the child Horus on her lap found on this site. See Algaze et al. 1991: 198, fig. 23.

Periods Present: 8, 9.

Minimum occupied area estimates: Periods 8-9: 0.5 ha each.

Site 35. Girge Miçüero

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Length: 215 m (N-S); Width: 240 m (E-W); Area: 5.1 ha; Height: ca. 2-3 m.

Elevation at base: ca. ca. 400 m.

Geomorphological Location: On the gently sloping surface of an alluvial fan. No obvious source of water.

Location: About 2.2 km due south of Ortaköy (Gündihadit) Village.

Collection: Single unit.

Periods Present: Periods 2, 3, 7, 9, 11, 11/12, 16.

Minimum occupied area estimates: Periods 2, 3, 7, 9, 11, 11/12, 16: 0.5 ha each.

Site 36. Girge Barasta

Map: Fig. 3.

Description: Low mound.

Dimensions: Length: 170 m (N-S); Width: 180 m (E-W); Area: 3.1 ha; Height: ca. 1-1.5 m.

Elevation at base: ca. 405 m.

Geomorphological Location: On the gently sloping surface of a broad alluvial fan, next to a slightly incised dry wash.

Location: About 1.8 km SSW of Ortaköy (Gündihadit) village.

Collection: Single unit.

Periods Present: 2, 3, 4a.

Minimum occupied area estimate: Periods 2, 3, 4a: 0.5 ha each.

Site 37. Girge Tahti

Map: Fig. 3.

Description: Roughly circular mound.

Dimensions: Diameter: 230 m; Area: 4.1 ha; Height: ca. 6 m.

Elevation at base: ca. 390 m.

Geomorphological Location: On broad, gently sloping alluvial fan. No obvious source of water at present.

Location: About 600 m southeast of Girik Bedro (Çiftlik) village.

General comments: Gravel road built over site.

Collection: Single unit.

Artifactual comments: Sprig ware represented by a single sherd.

Periods Present: Periods 3, 3/4, 9, 10 (?), 11, 12, 16.

Minimum occupied area estimates: Periods 3, 3/4, 9, 10 (?), 11, 12, 16: 0.5 ha each.

Site 38. Girge Mera

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Length: 160 m (N-S); Width: 130 m (E-W); Area: 2.1 ha; Height: ca. 4 m.

Elevation at base: ca. 375 m; at top 379 m.

Geomorphological Location: In the middle of a broad dry plain, which is probably a Pleistocene surface. No obvious source of water nearby.

Location: About 1.6 km SSE of Buğdaylı (Takyan) Village.

Collection: Single unit.

Periods Present: Periods 8, 9, 11, 11/12, 15.

Minimum occupied area estimates: Periods 8, 9, 11, 11/12, 15: 0.5 ha each.

Site 39. Near Girge Mera #1

Map: Fig. 3.

Description: Extended low mound with three distinct rises, possibly suggesting separate occupations or possibly buildings.

Dimensions: Length: 270 m (NW-SE); Width: 150 m (NE-SW); Area: 4 ha; Height: ca. 2 m.

Elevation at base: ca. 375 m.

Geomorphological Location: Same as Site 38, above.

Location: About 1.2 km SSE of Buğdaylı (Takyan) Village.

Collection: Single unit.

Periods Present: 9, 14.

Minimum occupied area estimates: Periods 9, 14: ca. 0.5 ha each.

Site 40. Gre Musto.

Map: Fig. 3.

Description: Elongated, saddle-shaped mound.

Dimensions: Length: 300 m (E-W); Width: 160 m (N-S); Area: 4.8 ha; Height: ca. 4.5 m. Also low domed mound, possibly associated, on north edge of larger site: 120 m (N-S) x 100 (E-W); Area: 1.2 ha. Total area: 6 ha.

Elevation at base: ca. 370-375 m.

Geomorphological Location: Same as Site 38, above.

Location: ca. 2 km SSW of Buğdaylı (Takyan) Village.

Artifactual comments: Low rise on north edge collected separately as "north spur." Obsidian noted, possibly associated with a Halaf or Ubaid occupation, both of which were recorded on the main mound.

Periods Present (main mound): Periods: 2, 3, 5, 5a, 8, 9, 10 (?), 11, 12.

Periods Present (north spur): Periods: 8, 9.

Minimum occupied area estimates (main mound): 2, 3, 5, 5a, 8, 9, 10 (?), 11, 12: 0.5 ha each.

Minimum occupied area estimates (north spur): 8, 9: 0.5 ha each.

Site 41. Girik Bedro

Map: Fig. 3; Plan: Fig. 8g.

Description: Ovoid, low extended mound.

Dimensions: Length: 300 m (NE-SW); Width: 190 m NW-SE; Area: 5.7 ha; Height: ca. 6 m.

Elevation at base: ca. 395 m; top 401 m.

Geomorphological Location: On a low terrace beside the Celal Dere, a seasonal stream that is sharply incised into the surrounding alluvial fan.

Location: Site is just west and northwest of Çiftlik (Girik Bedro) village.

General comments: In 1888, travelers observed a village of about 100 houses directly on the Girik Bedro mound (British Admiralty Naval Intelligence Division 1917: 236).

Collection: Quadrants.

Periods Present: 4a (1 quadrant); 5a (1 quadrant), 9 (3 quadrants), 11 (1 quadrant), 16 (2 quadrants).

Minimum occupied area estimate: 4a: 0.5 ha; 5a: 0.5 ha, 9: 4.2 ha, 11: 0.5 ha, 16: 2.8 ha.

Site 42. Near Girik Bedro # 1

Map: Fig. 3; Plan: Fig. 8g.

Description: Low domed mound.

Dimensions: Length: 70 (NW-SE); Width 120 m (NE-SW); Area: 0.84 ha; Height: 1.5-2 m.

Elevation at base: ca. 395 m.

Geomorphological Location: Same as Girik Bedro, above.

Location: About 50 m northwest of Girik Bedro, above.

Collection: Single unit.

Periods Present: 7, 9, 14, 16.

Minimum occupied area estimate: Periods 7, 9, 14, 16: 0.5 ha each.

Site 43. Near Girik Bedro # 2

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Length: 170 m (N-S); Width: 150 m (E-W); Area: 2.5 ha; Height: ca. 1.5-2 m.

Elevation at base: ca. 405 m.

Geomorphological Location: On the surface of a gently sloping alluvial fan, just west of Celal Dere, an incised seasonal stream.

Location: About 1.7 km NNW of Çiftlik village.

General comments: Near Girik Bedro # 2 is probably the Sasanian/Early Islamic successor site to Girik Bedro (Site 41).

Collection: Single unit.

Periods Present: Periods 12, 14.

Minimum occupied area estimate: Periods 12, 14: 0.5 ha each.

Site 44. Near Girik Bedro # 3

Map: Fig. 3.

Description: Low domed site.

Dimensions: Length: 80 m (N-S); Width: 70 m; Area: 0.56 ha; Height: ca. 1.5 m.

Elevation at base: ca. 405 m.

Geomorphological Location: Same as site 43, above.

Location: Same as site 43, above.

Collection: Single unit.

Periods Present: 10 (?), 14.

Minimum occupied area estimate: Periods 10 (?) and 14: 0.5 ha each.

Site 45. Near Girik Bedro # 4

Map: Fig. 3.

Description: Low domed site

Dimensions: Diameter: 60 m; Area: 0.3 ha; Height: ca. 1 m.

Elevation at base: ca. 405 m.

Geomorphological Location: Same as site 43, above.

Location: Same as site 43, above.

Collection: Single unit.

Artifactual comments: Period 13 is recognized on the basis of a single "groovy" amphora handle, which might well be part of the Period 14 assemblage.

Periods Present: Periods 7, 8, 9, 13, 14.

Minimum occupied area estimate: Periods 7, 8, 9, 13, 14: 0.3 ha each.

Site 46. Nervan Höyük

Map: Fig. 3; Plan: Fig. 8a.

Description: Conical mound and associated (walled) terrace with at least three distinct extramural areas. Described in greater detail in text.

Dimensions: High mound: Length: ca. 160 m (E-W); Width: ca. 100 m (N-S). High mound plus walled terrace: Length: ca. 330 m; (N-S), Width: 200 m (E-W). High mound, walled terrace, and extramural areas: Length: 400 m (N-S); Width: 380 m (E-W). Total Area: 15.2 ha; Height (high mound): ca. 19 m.

Elevation at base: ca. 320 m.

Geomorphological Location: By the side of a substantial spring that gives rise to the Şurik Dere.

Location: About 100 m east of Kavallı (Nervan) Village.

General comments: In 1888, a traveler observed a village of about 100 houses directly on Nervan mound (British Admiralty Naval Intelligence Division 1917: 236). This accounts for the Ottoman remains noted below.

Collection: High mound, (walled) terrace top and slopes, general collection (high mound and walled terrace), lowest (extramural) terrace, SE mound, S mound.

Periods represented by morphological area: High Mound: 3, 4a, 6, 7, 8, 9, 15, 16; Walled Terrace: 1b, 2, 3, 5a, 6, 7, 8, 9, 16; Lowest [extramural] Terrace: 5, 7, 16; SE mound: 6, 7 (the SE Mound had a heavy concentration of Khabur Ware wasters, indicating a pottery production area); S Mound: 7.

Minimum occupied area estimate: 1b: 0.5 ha, 2: 0.5 ha, 3: 1 ha; 4a: 0.5 ha, 5: 1; 6: 1 ha, 7: 15 ha, 8: 6.6 ha, 9: 6.6 ha; 11: 0.5, 15: 0.5 ha, 16: ca. 12 ha.

Site 47. Near Nervan # 1

Map: Fig. 3.

Description: Flat scatter.

Dimensions: Length: 160 m (N-S); Width: 60 m (E-W); Area: 0.96 ha; Height: ca. 0 m.

Elevation at base: ca. 410 m.

Geomorphological Location: On flat alluvial fan along Şurik Dere.

Location: ca. 200 m due south of Nervan Höyük.

General comments: Almost certainly a single period site.

Artifactual comments: Early Halaf.

Periods Present: 2.

Minimum occupied area estimate: Period 2: 0.96 ha.

Site 48. Ali Huseynoğlu Höyük

Map: Fig. 3.

Description: Low, domed mound.

Dimensions: Length: 215 m; (N-S) Width: 200 m (E-W); Area: 4.3 ha; Height: ca. 2 m.

Elevation at base: ca. 400 m.

Geomorphological Location: On a gently sloping alluvial fan surface dissected by the Şurik Dere.

Location: By the Şurik Dere; ca. 1.5 km SW of Nervan Höyük.

Periods Present: 8, 9, 15, 16.

Minimum occupied area estimate: Period 8, 9, 15, 16: 0.5 ha.

Site 49. Takyan Höyük

Map: Fig. 3; Plan: Fig. 8f

Description: Ovoid mound with several terraces.

Dimensions: Length: 330 m (ENE); Width: 300 m (WSW); Area: 10 ha; Height: ca. 14.5 m max.

Elevation at base: ca. 385 m.

Geomorphological Location: On a broad, gently sloping alluvial fan. By the side of Şurik Dere.

Location: About 1.4 km NNW of Buğdaylı (Takyan) Village.

General comments: In 1888, a traveler observed a village of about 100 houses directly on Takyan mound (British Admiralty Naval Intelligence Division 1917: 236). Remnants of a single relatively recent structure (ca. 25 x 30 m) with several rooms (stones cemented with lime mortar) is visible on top of the site. There are also remains of a possible water mill on the northwest slope of the high mound, facing the Şurik Dere.

Collection: Top of high mound, slopes of high mound, first (lower) terrace, second (higher) terrace.

Periods represented by morphological area: High Mound: 1b, 2, 3, 5, 5b, 8, 9, 16; First Terrace: 2, 4a, 7, 9, 16. Second Terrace: 2, 3, 8, 9, 16.

Minimum occupied area estimate: Periods 1b, 4a, 5, and 7: 0.5 ha each; Periods 2, 9 and 16: 10 ha each; Period 3 and 8: 1 ha each.

Site 50. Near Takyan # 1

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Length: 60 m (E-W); Width: 50 m (N-S); Area: 0.3 ha; Height: ca. 1.5 m.

Elevation at base: ca. 385 m.

Geomorphological Location: On a side slope of the Şurik Dere.

Location: About 200 m upstream of Takyan, on the same side of the stream.

Periods Present: 3, 7, 9, 12.

Minimum occupied area estimates: Periods 3, 7, 9, 12: 0.5 ha each.

Site 51. Near Takyan # 2

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Diameter 120: m; Area: 1.1 ha; Height: ca. 1 m.

Elevation at base: ca. 385 m.

Geomorphological Location: On gentle slope dropping down to Şurik Dere, which is slightly incised into a broad alluvial fan surface.

Location: About 100 m upstream of Takyan, and on the opposite side of the Şurik Dere.

Periods Present: 1b, 3, 14, 15.

Minimum occupied area estimates: Periods 1b, 3, 14, 15: 0.5 ha each.

Site 52. Near Takyan # 3

Map: Fig. 3.

Description: Flat scatter.

Dimensions: Length: 120 m (E-W); Width: 80 m (N-S); Area: 0.96 ha; Height: ca. 0 m.

Elevation at base: ca. 390 m.

Geomorphological Location: Same as site 51, above.

Location: About 200 m upstream of Takyan on the opposite side of the Şurik Dere.

Periods Present: 3, 4a, 7, 9.

Minimum occupied area estimates: Periods 3, 4a, 7, 9: 0.5 ha each.

Site 53. Near Takyan # 4

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Diameter: 80 m; Area: 0.5 ha; Height: ca. 0.5 m.

Elevation at base: ca. 385 m.

Geomorphological Location: Same as site 51, above.

Location: About 150 m upstream of Takyan on the opposite side of the Şurik Dere.

Periods Present: 11, 14.

Minimum occupied area estimates: Periods 11, 14: 0.5 ha.

Site 54. Amarsava Höyük

Map: Fig. 3.

Description: Conical high mound with shell-shaped lower terrace and associated but separate scatter. The scatter is an unrounded (extramural?) area opposite the mound, on the other side of the dere.

Dimensions: High Mound: Length: 150 m. (N-S); Width: 110 m. (E-W) Height: ca. 12.5 m (NW)-9.5 m (SE).

Elevation at base: ca. ca. 374 m.

Terrace: 170 m (N-S), 140 (E-W). Area: 2.4 ha.

High Mound and Terrace: Length: 320 m. (N-S); Width: 250 m. (E-W) m; Area: 8 ha.

“East Scatter”: Length: 600 m. (N-S); Width: 100 m. (E-W) m; Area: 6 ha; Height: 0.

Geomorphological Location: On lower, gently sloping alluvial fan surface, which is slightly dissected by Şurik Dere.

Location: 1.4 km downstream along Şurik Dere from Takyan Höyük.

Collection areas: High Mound, Terrace, “East Scatter”.

Periods Present:

High Mound: 1b, 2, 5, 7, 11, 15.

Terrace: Periods 2 (1 quadrant), 4a (1 quadrant), 5A (1 quadrant), 7 (all over), 8 (2 quadrants), 9 (2 quadrants), 11 (1 quadrant), 15 (1 quadrants), 16 (2 quadrants).

“East Scatter”: Periods 2, 6, 7, 15, 16.

Minimum occupied area estimate (High Mound plus Terrace): Periods 1b, 4a: 0.5 ha each; Periods 2 and 5: 1 ha each; Periods 7: 8, 11, and 15: 1 ha; each; Periods 8, 9: and 16: 1.2 ha each.

Minimum occupied area estimate (“East Scatter”): Periods 2, 6, 7, 15, 16: 0.5 ha each.

Site 55. Near Amarsava # 1

Map: Fig. 3.

Description: Scatter. No visible mounding.

Dimensions: Length: 95 m (N-S); Width: 75 m (E-W); Area: 0.71 ha; Height: ca. 0 m.

Elevation at base: ca. 370 m.

Geomorphological Location: On gently sloping alluvial fan surface dissected by Şurik Dere.

Location: By Şurik Dere; ca. 150 m NE of Amarsava Höyük.

Periods Present: Period 1A

Minimum occupied area estimate: Period 1a: 0.71 ha.

Site 56. Gre Hazale

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Length: 180 m (N-S); Width: 135 m (E-W); Area: 2.43 ha; Height: ca. 2 (E) to 4 m (N).

Elevation at base: ca. 365 m.

Geomorphological Location: On a gently sloping alluvial fan which is slightly incised by Şurik Dere, nearby.

Location: About 1 km downstream (SSW) of Amarsava (Site 54) along the Şurik Dere.

Periods Present: 7, 8, 9, 11, 14, 15, 16.

Minimum occupied area estimates: Periods 7, 8, 9, 11, 14, 15, 16: 0.5 ha each.

Site 57. Near Şurik Dere # 3

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Diameter: 60 m; Area: 0.3 ha; Height: ca. 1 m.

Elevation at base: ca. 370 m.

Geomorphological Location: On Surface of a low Pleistocene terrace.

Location: Along Şurik Dere, about 2.6 km northeast of Basorin.

Periods Present: 9, 16.

Minimum occupied area estimates: Periods 9, 16: 0.3 ha each.

Site 58. Near Şurik Dere # 2

Map: Fig. 3.

Dimensions: Diameter: 50 m; Area: 0.2 ha; Height: ca. 1 m.

Elevation at base: ca. 365 m.

Geomorphological Location: Same as Site 57, above.

Location: Along the Şurik Dere, about 2.2 km northeast of Basorin.

Periods Present: 14.

Minimum occupied area estimate: Period 14: 0.2 ha.

Site 59. Near Şurik Dere # 1

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Length: 200 m (N-S); Width: 150 m (E-W); Area: 3 ha; Height: ca. 1 m.

Elevation at base: ca. 365 m.

Geomorphological Location: Same as Site 57, above.

Location: Along the Şurik Dere, about 2 km northeast of Basorin.

Periods Present: 9, 14.

Minimum occupied area estimates: Periods 9, 14: 0.5 ha each.

Site 60. Alişama Höyük

Map: Fig. 3.

Description: Low Conical Mound.

Dimensions: 115 m diameter; Area: 0.7 ha; Height: ca. 3 m.

Elevation at base: ca. 360 m.

Geomorphological Location: On low Pleistocene Terrace overlooking the slightly incised Şurik Dere.

Location: ca. 1.6 km due east of Basorin Village.

General comments: Sides of mound have been cut to make way for irrigation pipes.

Collection areas: general collection.

Periods Present: 7, 8, 9, 10 (?), 16.

Minimum occupied area estimate: Periods 7, 8, 9, 16: 0.5 ha each.

Site 61. Serebiye Harabe

Map: Fig. 3.

Description: Scatter on top of natural rise.

Dimensions: Length: 150 m (NW-SE); Width: 220 m (NE-SW); Area: 3.3 ha; Height: depth of deposition unclear.

Elevation at base: ca. 455 m.

Geomorphological Location: On crest and flanks of low ridge underlain by conglomerate. By side of a now dry dere.

Location: About 200 m due north of Yeniköy (Serebiye) Village.

Periods Present: 9, 14.

Minimum occupied area estimates: Periods 9, 14: 0.5 ha each.

Site 62. Kortik Höyük

Map: Fig. 3.

Description: Conical high mound with associated ovoid lower terrace.

Dimensions: High mound: Diameter 40 m; High mound and terrace: Length: 120 m (N-S); Width: 55 m (E-W); Area: 0.66 ha; Height: High mound: ca. 4.5-5 m; terrace ca. 1.5-2 m.

Elevation at base: ca. 445 m.

Geomorphological Location: On edge of a bench underlain by conglomerate bedrock overlooking the deeply incised Bazamır Dere. Spring just east of site.

Location: About 200 m due west of Çukurka Village.

General comments: Traces of ruined architecture visible on top of mound. Much of the high mound is covered with graves, presumably recent.

Collection: Single unit.

Periods Present: 1a, 1b, 2, 7, 9, 14, 16.

Minimum occupied area estimate: Periods: 1a, 1b, 2, 7, 9, 14, 16: 0.5 ha each.

Site 63. Hurisya Harabe

Map: Fig. 3.

Description: Low flat occupation.

Dimensions: Length: 110 m (N-S); Width: 150 m (E-W); Area: 1.65 ha; Height: ca. 1-1.5 m.

Elevation at base: ca. 415 m.

Geomorphological Location: On crest of a ridge underlain by conglomerate. By the side of Bazamır Dere.

Location: ca. 800 m WSW of Otludere (Hurisya) Village.

Periods Present: 9, 11, 15, 16.

Minimum occupied area estimate: Periods 9, 11, 15, 16: 0.5 ha.

Site 64. Near Hurisya # 1

Map: Fig. 3.

Description: Flat scatter.

Dimensions: Length: 50 m (N-S); Width: 30 m (E-W); Area: 0.15 ha; Height: ca. 0 m.

Elevation at base: ca. 420 m.

Geomorphological Location: Same as site 63, above.

Location: Same as site 63, above.

Periods Present: 3, 4a, 7.

Minimum occupied area estimate: Periods 3, 4a, 7: 0.15 each.

Site 65. Kütnüz Höyük

Map: Fig. 3.

Dimensions: Length: 170 m (E-W); Width: 90-150 m (N-S); Area: 2 ha; Height: ca. 9.5 m.

Elevation at base: ca. 435 m.

Geomorphological Location: On a gently sloping, broad alluvial fan surface. Springs just east and west of the site.

Location: About 400 m north of Ceylan (Kütnüz) Village.

Collection: Single unit.

Periods Present: 1b, 3, 5, 5a, 7, 8, 9, 14, 15, 16.

Minimum occupied area estimates: Periods 1b, 3, 5, 5a, 7, 8, 9, 14, 15, 16: 0.5 ha each.

Site 66. Girge Kavsi # 1

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Length: 100 m (NE-SW); Width: 50 (E-W) m; Area: 0.5 ha; Height: ca. 2 m.

Elevation at base: ca. 430 m.

Geomorphological Location: On a narrow, low terrace by the side of a small perennial stream and within a steeply incised valley. Site is situated near a bank of springs.

Location: About 300 m due east of Duruklu (Hazayi) village.

General comments: Site was covered in vegetation and produced few sherds.

Periods Present: 14, 16.

Minimum occupied area estimate: Periods 14, 16: 0.5 ha each.

Site 67. Girge Kavsi # 2

Map: Fig. 3.

Description: Low conical mound.

Dimensions: Length: 80 m (N-S); Width: 125 m (E-W); Area: 1 ha; Height: ca. 5 m.

Elevation at base: ca. 430 m.

Geomorphological Location: On a narrow, low terrace by the side of a small perennial stream and within a steeply incised valley. Site is situated near a bank of springs.

Location: About 300 m due east of Duruklu (Hazayi) village.

General comments: Site was covered in vegetation and produced few sherds.

Collection: Single unit.

Periods Present: Periods 14, 16.

Minimum occupied area estimate: Periods 14, 16: 0.5 ha each.

Site 68. Cin Höyük

Map: Fig. 3.

Dimensions: Diameter 50 m; Area: 0.2 ha; Height: ca. 3.5 m.

Elevation at base: ca. 430 m.

Geomorphological Location: On a narrow, low terrace by the side of a small perennial stream and within a steeply incised valley. Site is situated below a bank of springs.

Location: About 300 m SE of Duruklu (Hazayi) village.

General comments: Site was covered in vegetation and produced few sherds.

Collection: Single unit.

Periods Present: 8, 16.

Minimum occupied area estimate: Periods 8, 16: 0.2 ha each.

Site 69. Kerpiç Höyük

Map: Fig. 3.

Description: Low domed mound.

Dimensions: Unknowable (below); Remaining portion: Length: 100 m (E-W); Width: 30 m (N-S); Area: remaining: 0.3 ha; Height: ca. 2.5-3 m.

Elevation at base: ca. 420 m.

Geomorphological Location: On a side slope of a shallow valley incised by a perennial stream. Springs just west and north of the site.

Location: About 100 m SW of Duruklu (Hazayi) Village.

General comments: Site has been extensively disturbed by villagers extracting construction materials. By the time of our visit, only a small standing portion with an exposed profile remained of the original site.

Collection: Single unit.

Periods Present: 3, 9.

Minimum occupied area estimates: Periods 3 and 9: 0.5 ha each.

Site 70. Hazayi Höyük

Map: Fig. 3; Plan: Fig. 8c.

Description: Conical high mound and associated lower terrace.

Dimensions: High mound: Length: 90 m (N-S); Width: 55 m (E-W); High mound plus terrace: Length: 110 m (N-S); Width: 160 m (E-W); Area: 1.76 ha; Height: ca. 10 m.

Elevation at base: ca. 430 m.

Geomorphological Location: On a side slope of a shallow valley incised into conglomerate. Springs just east and south of site.

Location: about 200 m due west of Duruklu (Hazayi) Village.

General comments: High mound covered with an Islamic cemetery. Not collected.

Collection: Lower terrace collected as single unit.

Periods Present: 3, 7, 9, 14.

Minimum occupied area estimates: Periods 3, 7, 9, 14: 0.5 ha each.

Site 71. Pınarönü Harabe

Map: Fig. 3.

Dimensions: Length: 190 m (E-W) Width: 70 m (N-S); Area: 1.5 ha; Height: ca. 6 m.

Elevation at base: ca. 420m.

Geomorphological Location: On a low Pleistocene terrace overlooking the Nerdüş Çay, to the east. Springs just south and below site.

Location: About 400 m due west of Pınarönü (Avinyan) Village.

Artifactual comments: Site is littered with the remains of walls, apparently those of the earlier Pınarönü Village, which moved about 60 years ago.

Periods Present: 14, 16.

Minimum occupied area estimate: Periods 14, 16: 0.5 ha each.

Site 72. Near Nerdüş Çay # 1

Map: Fig. 3.

Description: Flat scatter.

Dimensions: Diameter: 50 m; Area: 0.2 ha; Height: ca. 0 m.

Elevation at base: ca. 390 m.

Geomorphological Location: On a low Pleistocene terrace overlooking the Nerdüş Çay, to the east.

Location: About 800 m due west of Pınarönü Village.

Periods Present: 4a.

Minimum occupied area estimate: Period 4a: 0.2 ha.

Site 73. Medieval? Bridge (Syria)

Map: Fig. 3.

Location: On Syrian side of Tigris banks. Not visited.

Site 74. Toptepe (tumuli?)

Elevation at base: 438 m.

Location: On a natural rise ca. 900 m north-east (at 65 degree angle) of Rubaikale.

General comments: Not visited.

Site 75. Near Girge Miçüero # 1

Map: Fig. 3.

Dimensions: Diameter 90 m; Area: 0.63 ha; Height: ca. 0.5 m.

Elevation at base: ca. 400 m.

Geomorphological Location: Same as Site 35, above.

Location: Same as Site 35, above.

General comments: About 50 m to the SE of Site 35.

Periods Present: Periods 9, 11, 12.

Minimum occupied area estimates: Periods 9, 11, 12: 0.5 ha each.

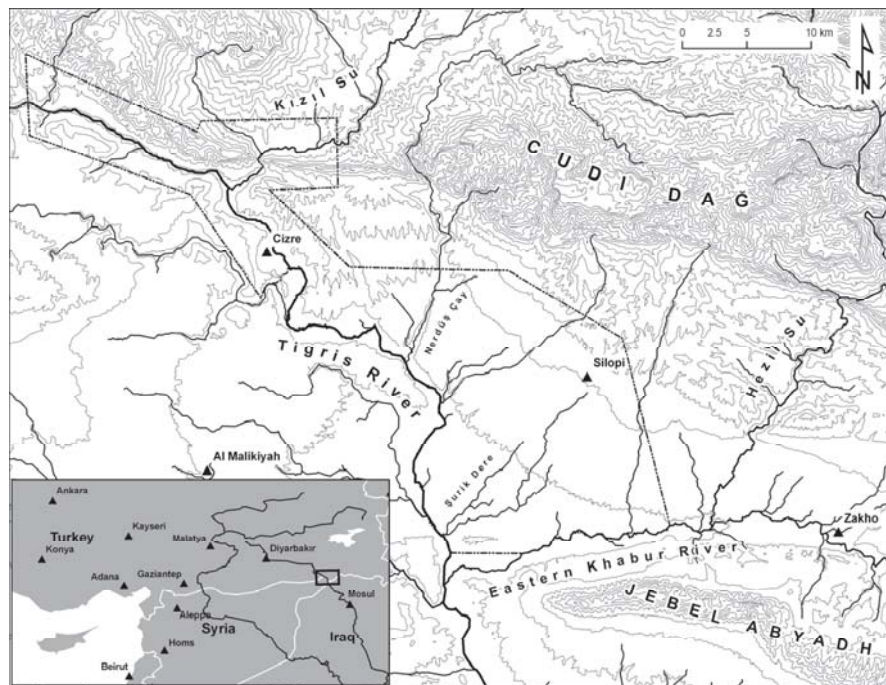


Figure 1. Location of Cizre-Silopi survey areas.

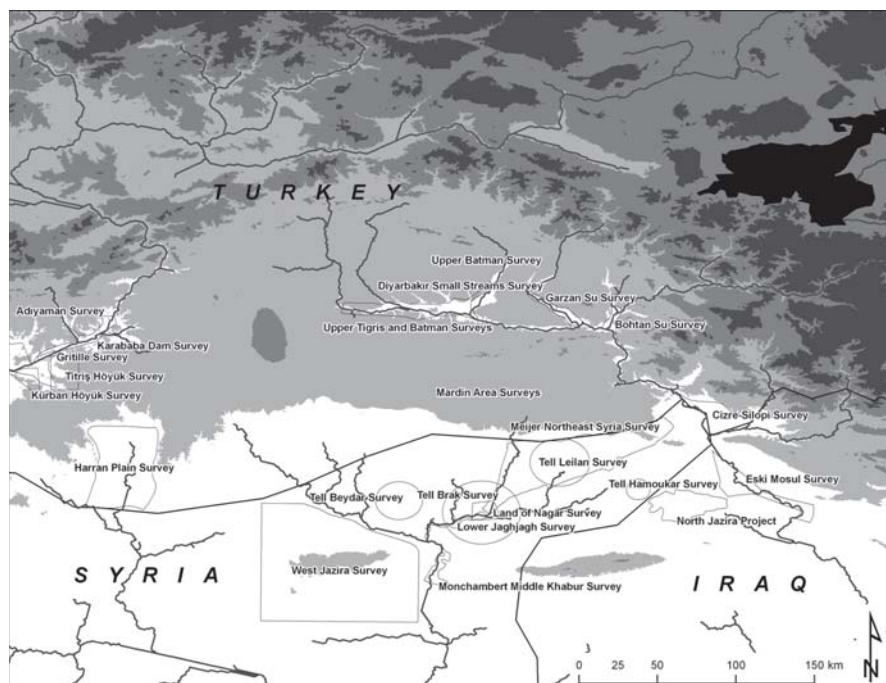


Figure 2. General topography of southeastern Turkey, northern Syria, and northern Iraq illustrating areas where pertinent archaeological surveys exist.

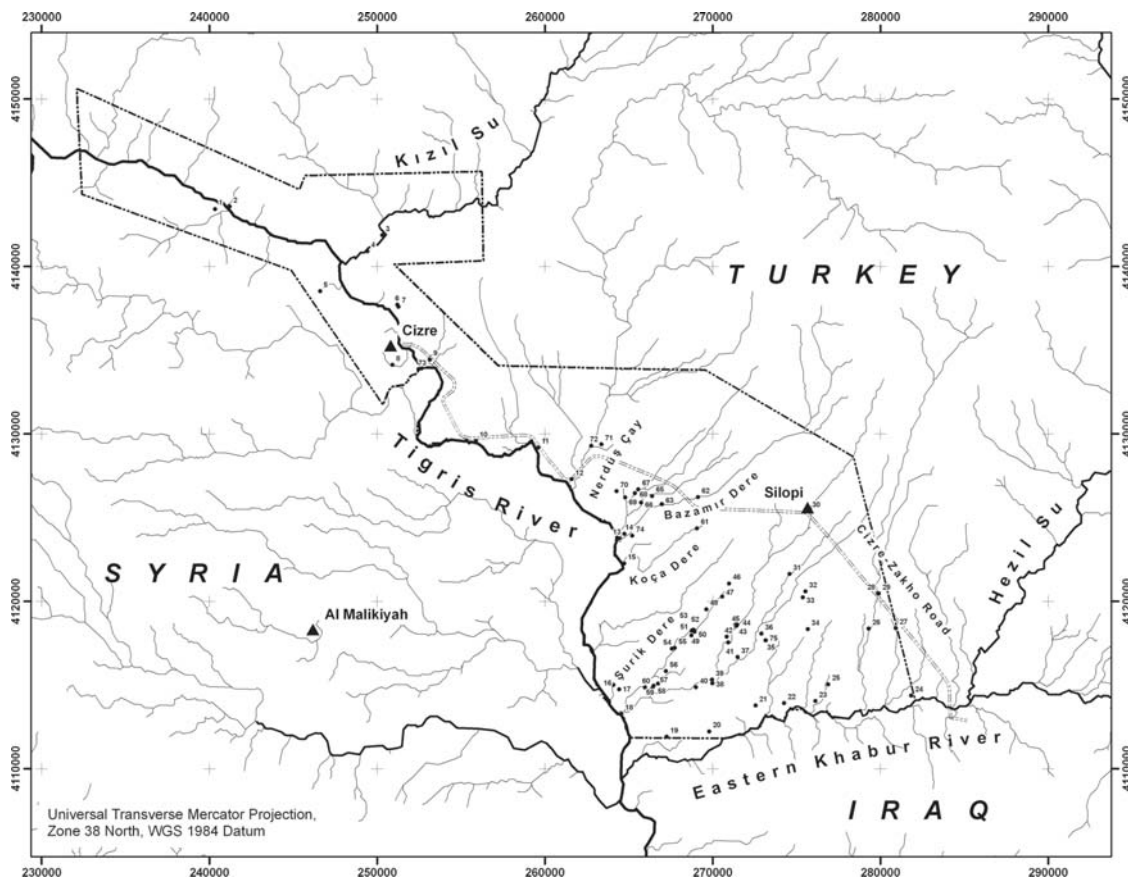


Figure 3. Cizre-Silopi survey area sites.

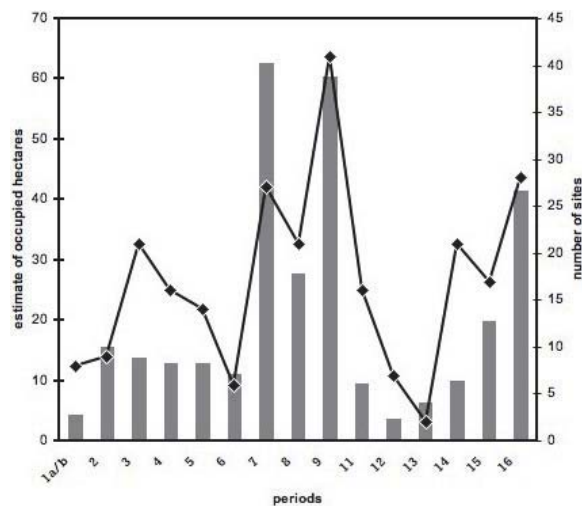


Figure 4. Demographic trends within the Cizre-Silopi survey area expressed in terms of both total estimated occupied hectares and total number of sites.

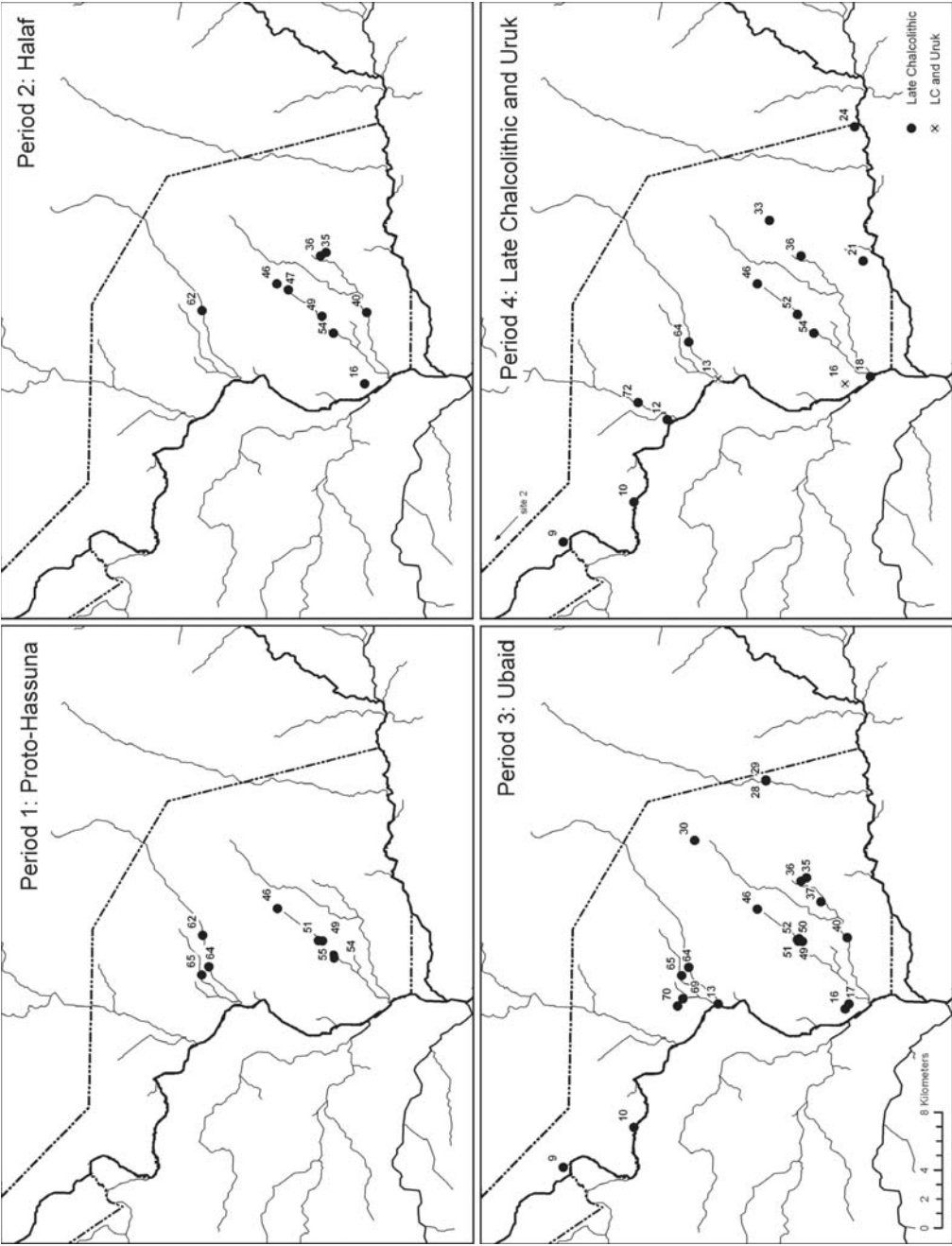


Figure 5. Phase maps.
Period 1: Pre-Hassuna; Period 2: Halaf; Period 3: Ubaid; Period 4: Late Chalcolithic/Uruk.

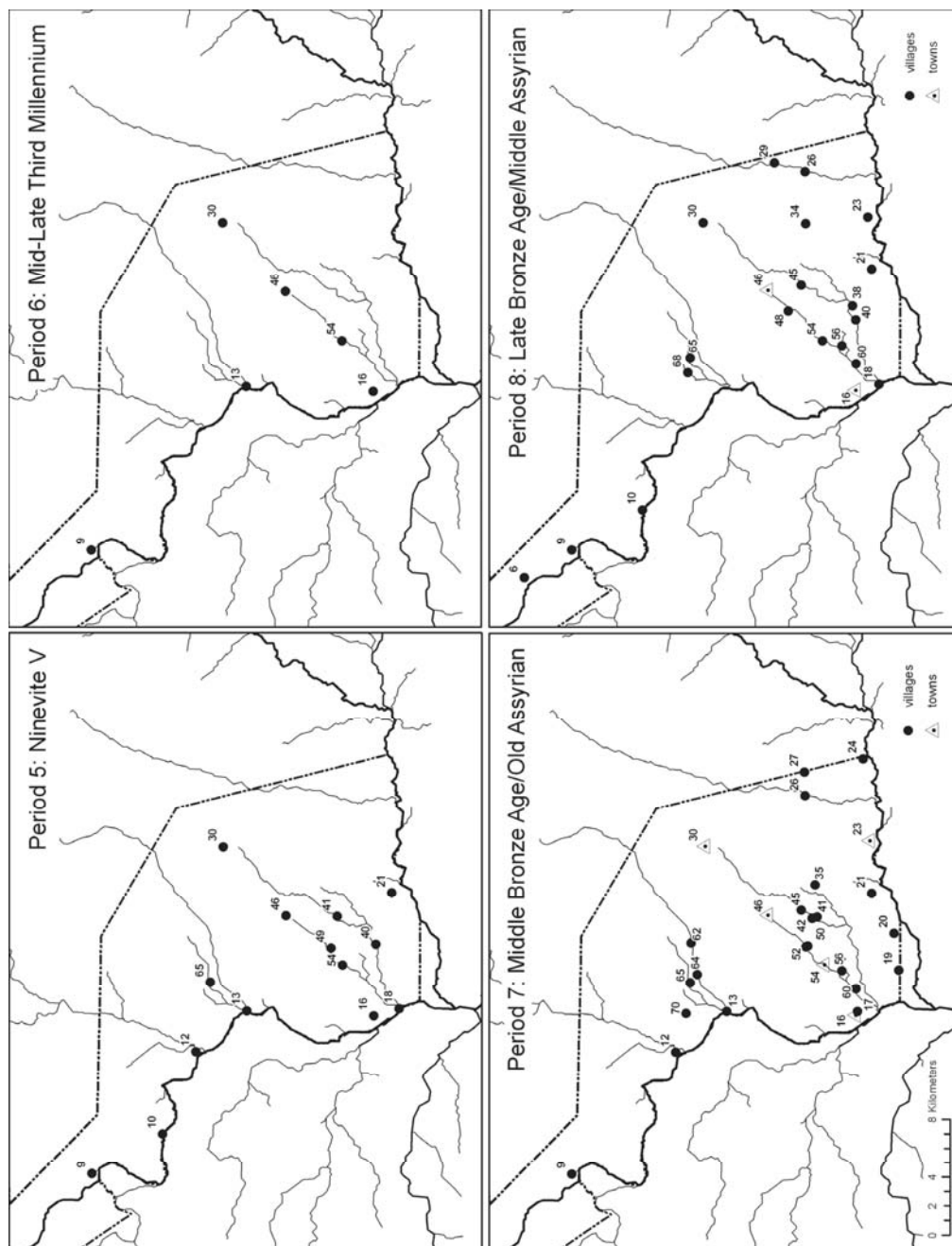


Figure 6. Phase maps. Period 5: Ninevite V; Period 6: Mid-Late Third Millennium; Period 7: Middle Bronze Age (Old Assyrian); Period 8: Late Bronze Age (Mittanian/Middle Assyrian).

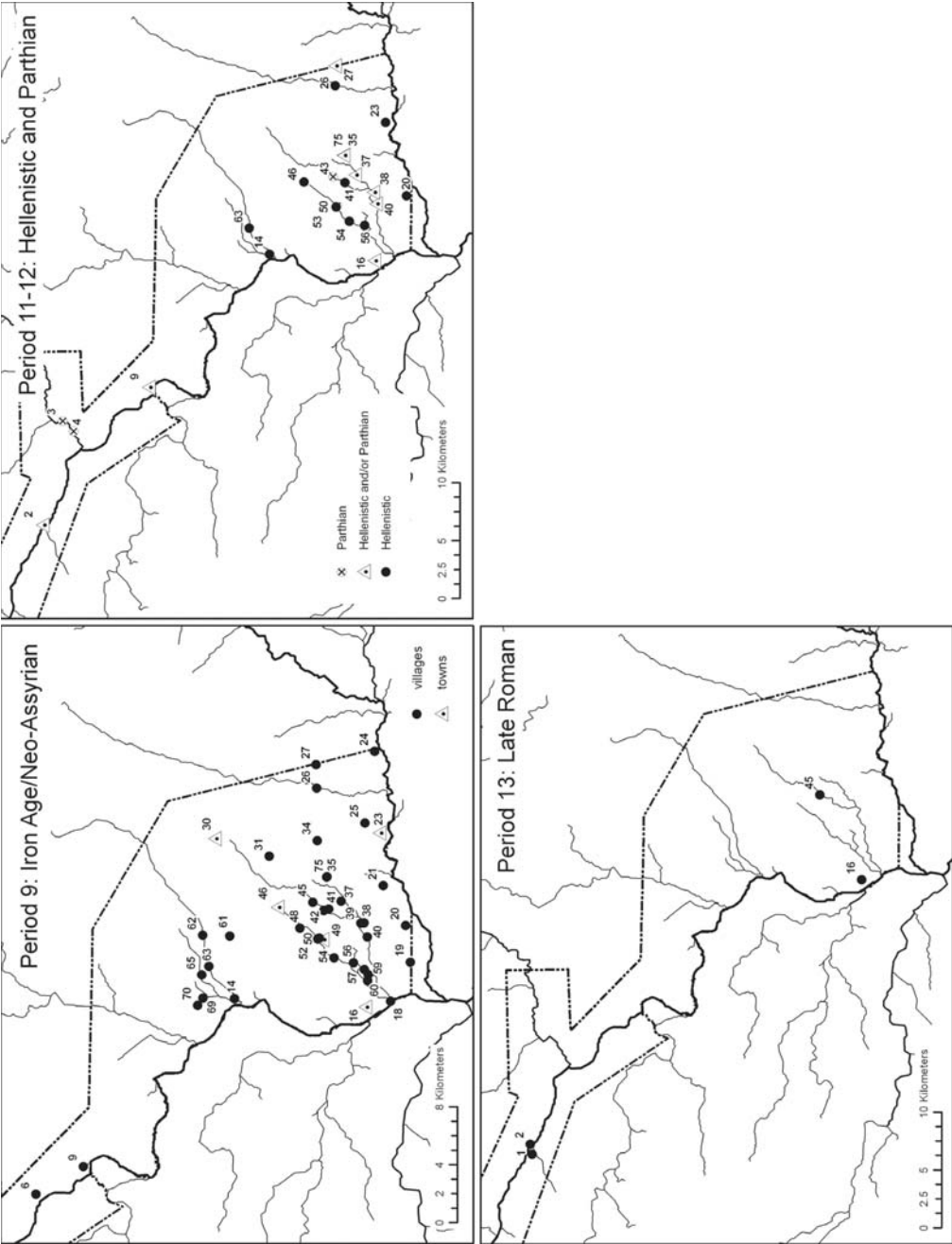


Figure 7. Phase maps. Period 9: Iron Age/Late Assyrian; Period 11/12: Hellenistic, Parthian, and Hellenistic/Parthian; Period 13: Late Roman.

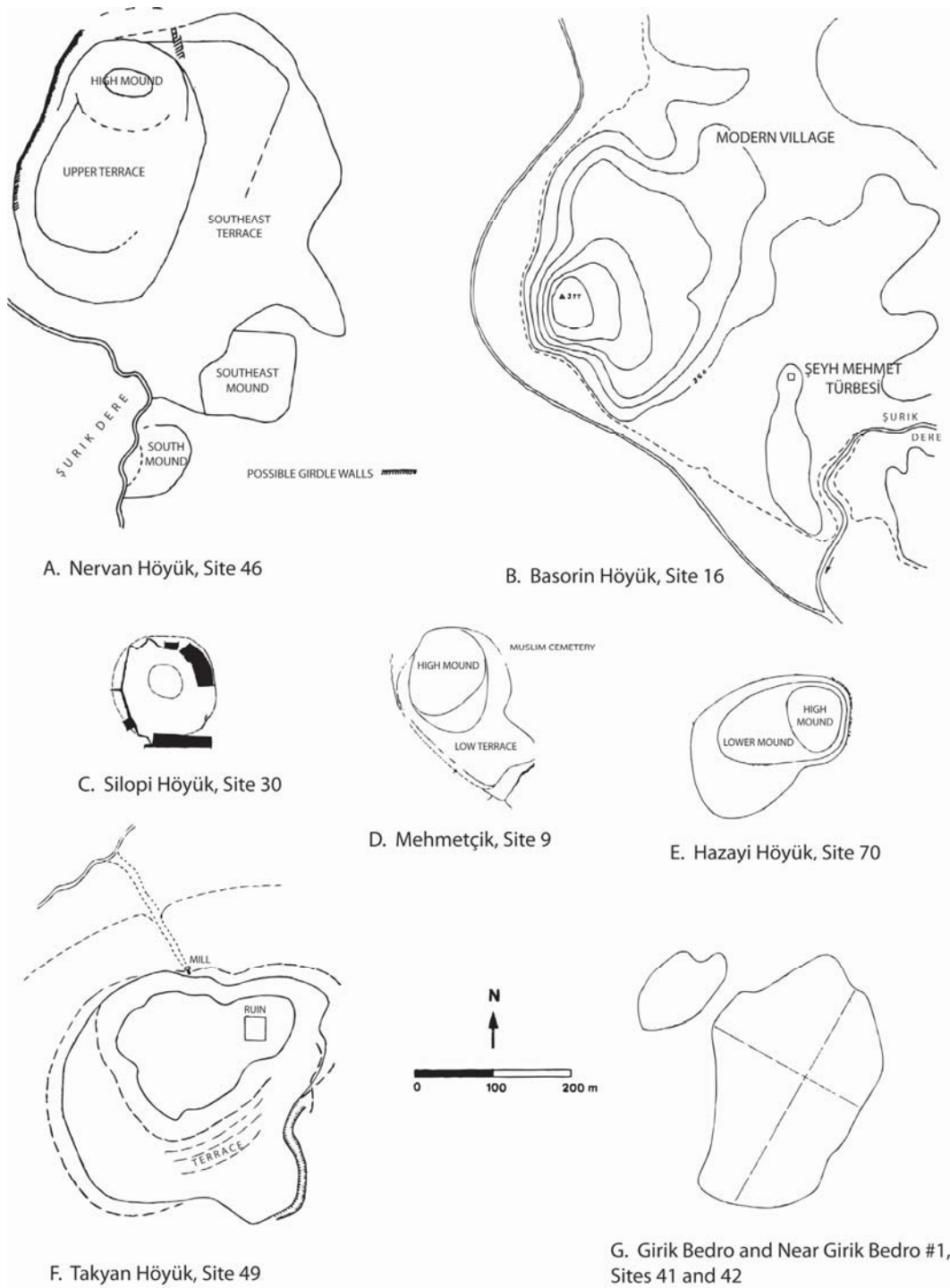


Figure 8. Schematic site plans.

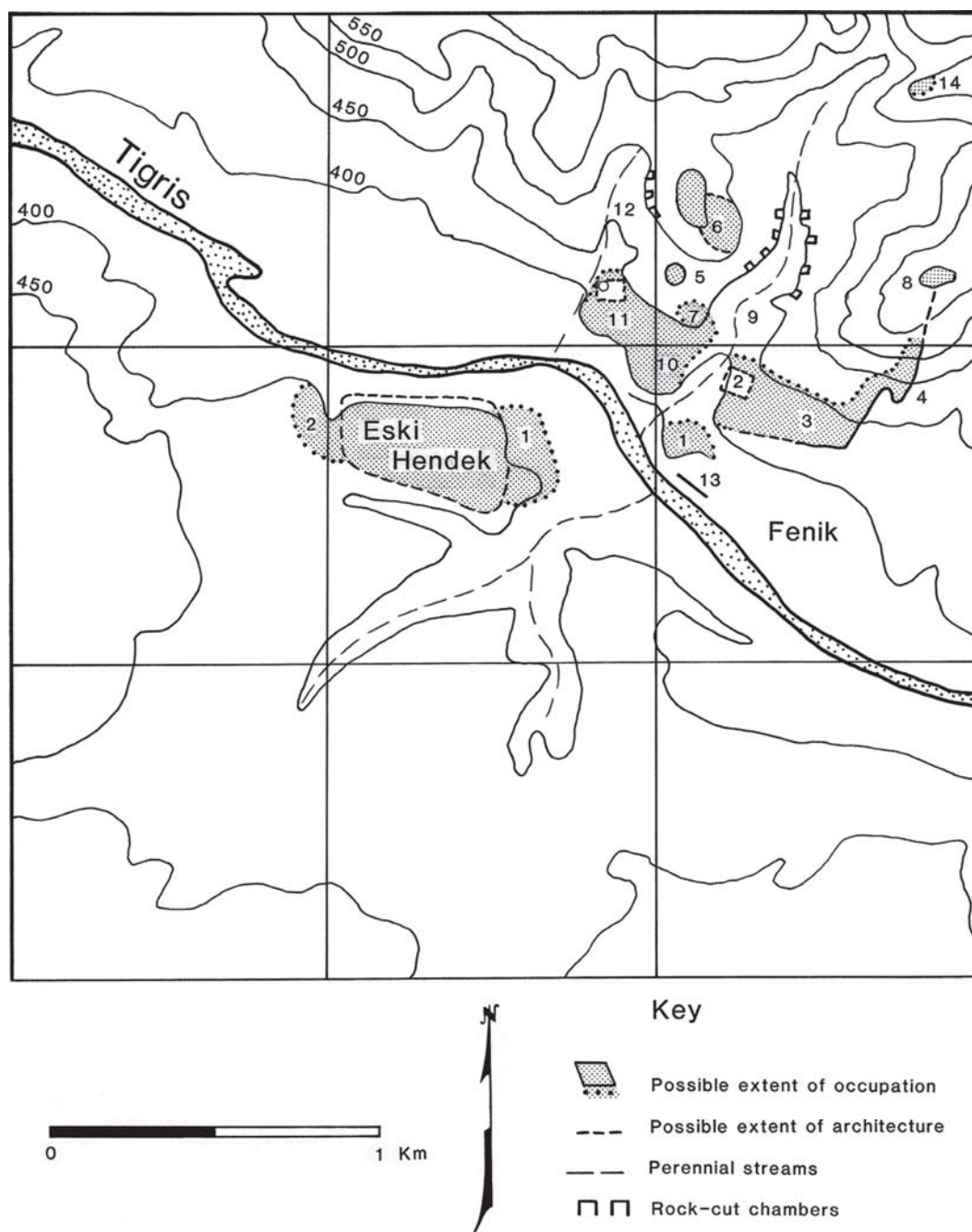


Figure 9. Contour map showing the location of features in Eski Hendek (Site 1: ancient Bezabde?) and Fenik (Site 2: ancient Pinaka).

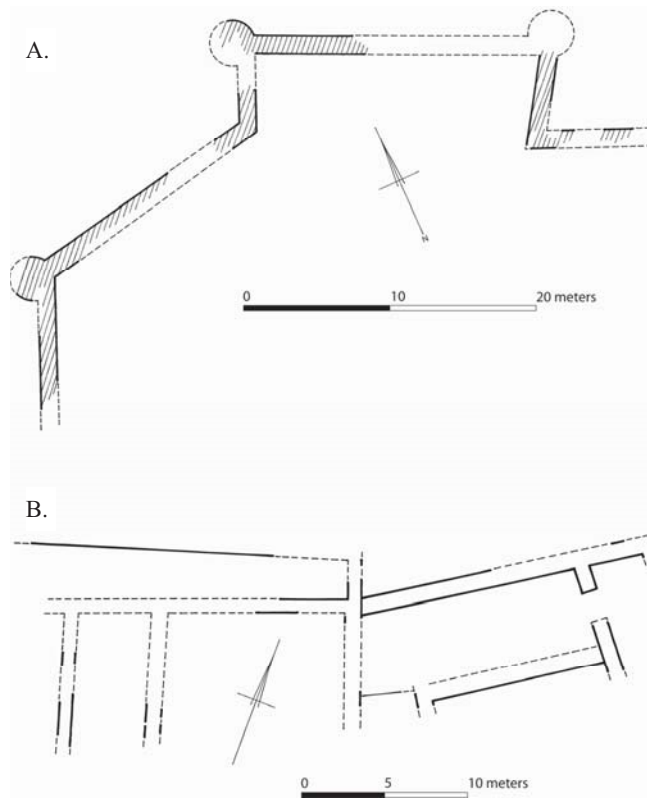


Figure 10. A. Plan of fortification of unknown date at Fenik (#2),
B. Plan of Structure of possible Late Roman Date at Fenik (#1).

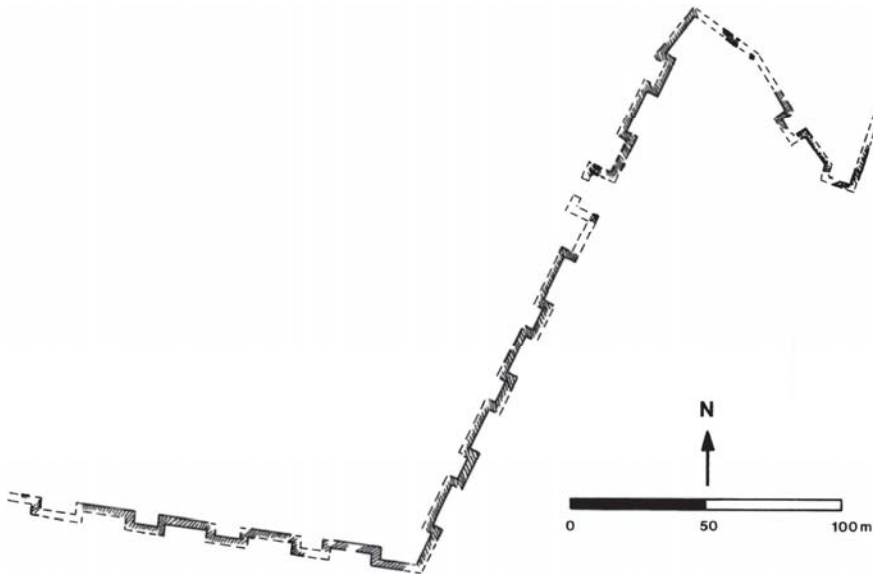


Figure 11. Plan of the Parthian fortification at Fenik (#3 and #4).

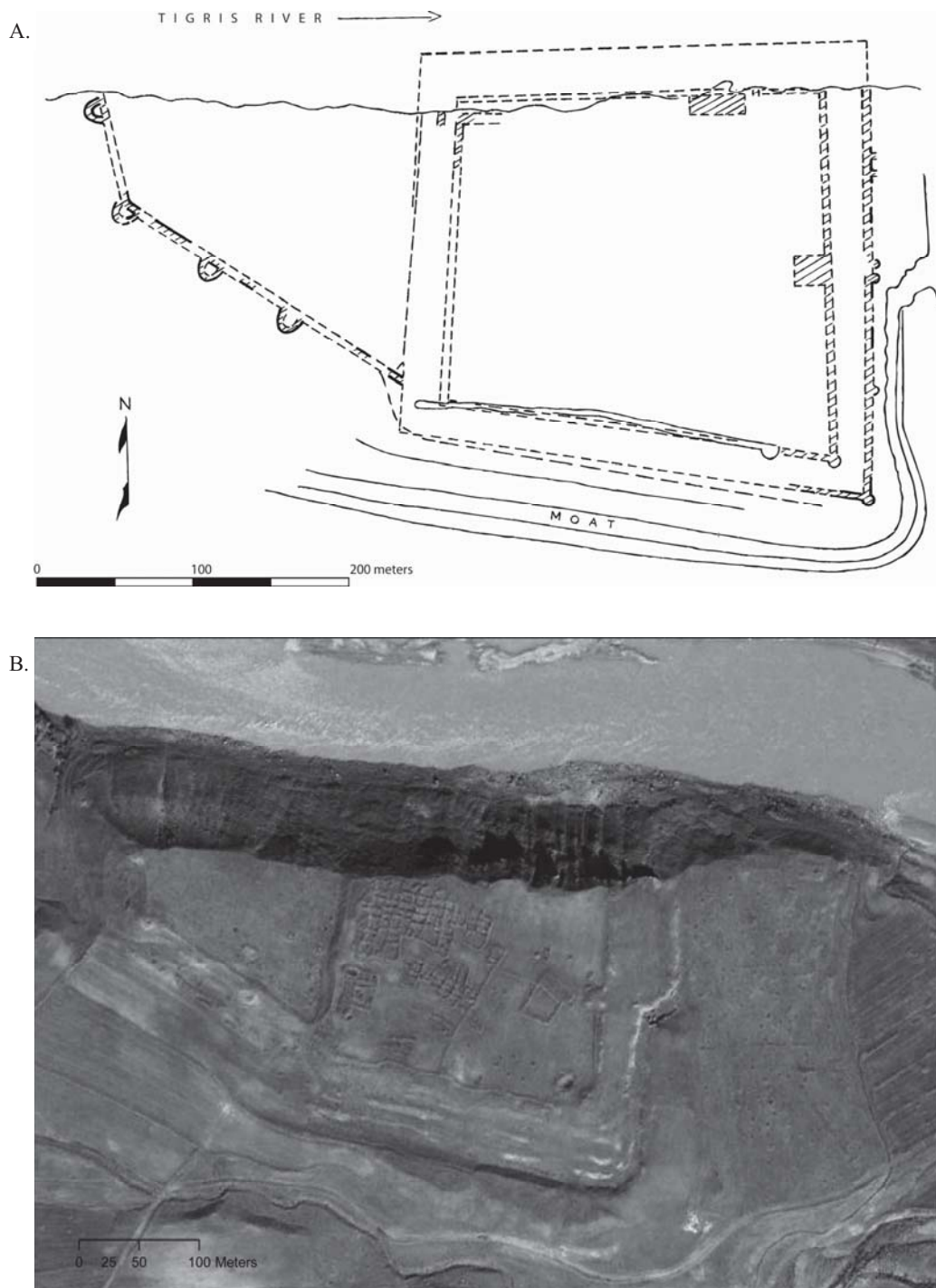


Figure 12. Eski Hendek (Bezabde?).

A. Schematic plan of Late Roman Castellum; B. Satellite (Google Earth) photo of Late Roman Castellum.

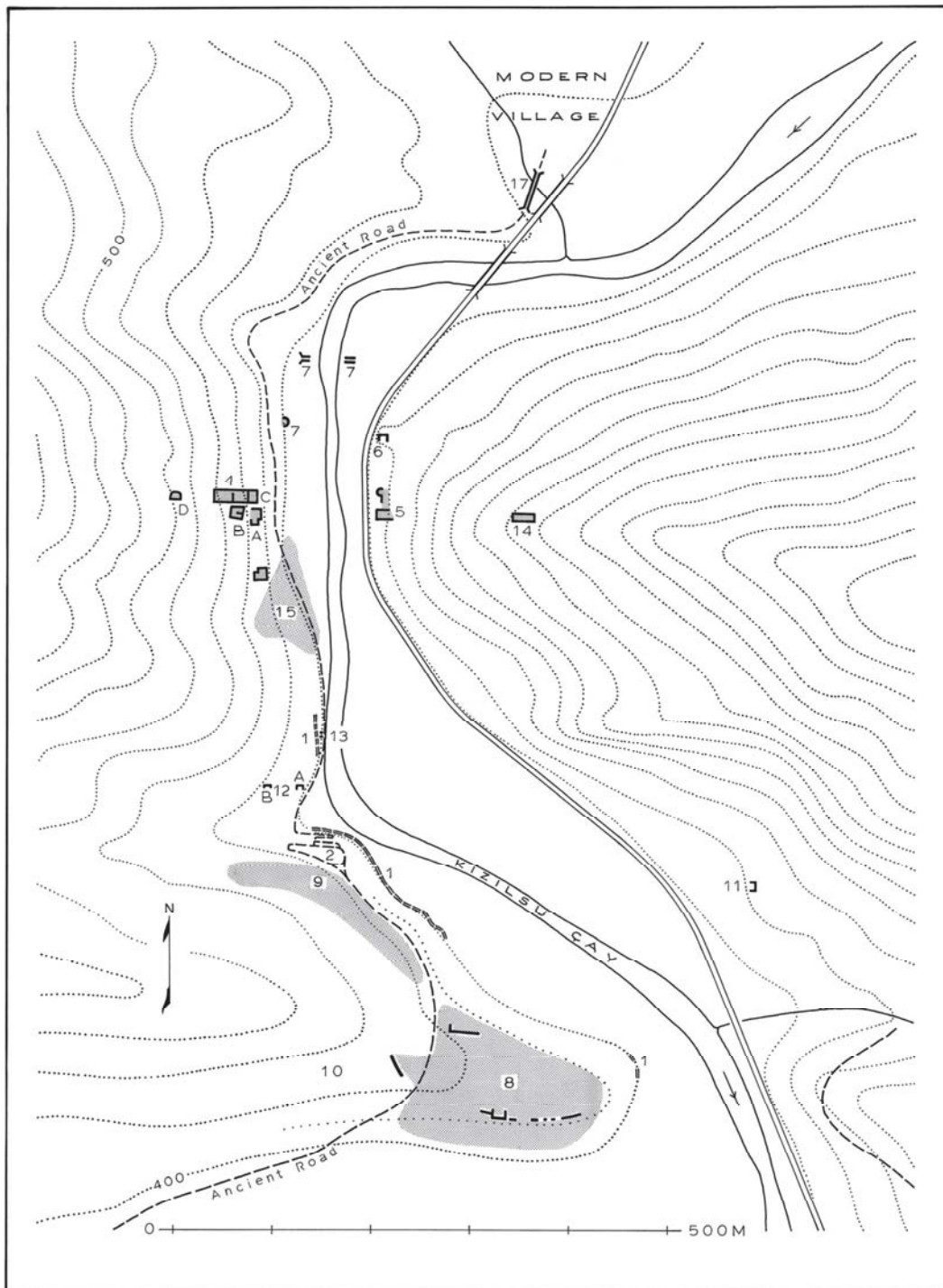


Figure 13. Contour plan of features in the Kazrik Boğazı area along the Kızıl Su.

Sherd descriptions Figure 14*Eski Hendek*

1. Orange buff clay, sandy tempering. Grey, red, white grits.
2. Brownish/orangish clay, small-sized white grits.
3. Orange clay. Small sized sandy temper, white, grey, red grits.
4. Dense brownish clay. Lighter buff slip on surface. Small white grits.
5. Greenish buff clay, sandy grit tempering.

Near Eski Hendek # 1

6. Grey clay grading to orange on surfaces. Small white grits.
7. Light greenish buff clay with sandy tempering.
8. Dense grey ware grading to brown on surfaces. Few scattered small-sized grits.
9. Orange clay, small white grits.

Fenik 3

10. Megarian ware. Brownish buff clay. Small white grits. Traces of red wash exterior, now eroded.
11. Greyish buff. Small, medium white grits.
12. Dense orange clay, no visible tempering other than for occasional scattered small white grits. Both surfaces covered with red wash.
13. Parthian. Badly eroded greenish blue glaze, now yellowish all over. Porous clay with minute grits and possibly some vegetal temper. Occasional large pebbles in matrix.
14. Pinkish buff, small white grits. Traces of reddish wash on exterior surface.
15. Brownish buff clay, medium sized white grits and red/grey grits.
16. Megarian ware. Brownish buff "gold flakes." Very minute small white grits.

Kazrik 8

17. Groovy lip. Orange clay with very small-sized white grits.
18. Buff clay tempered with a combination of small grits and vegetal tempering.
19. Dense, buff clay. No visible tempering. Both surfaces covered with brown wash.
20. Buff clay. Small-sized grits.
21. Dense orange clay, small white grits. Buff slip exterior surface.
22. Tan clay with chunks of limestone, red and grey crushed stone as tempering. Row of indentations.
23. Dense reddish buff clay. Blue-green glaze exterior and interior. Parthian fish bowl.

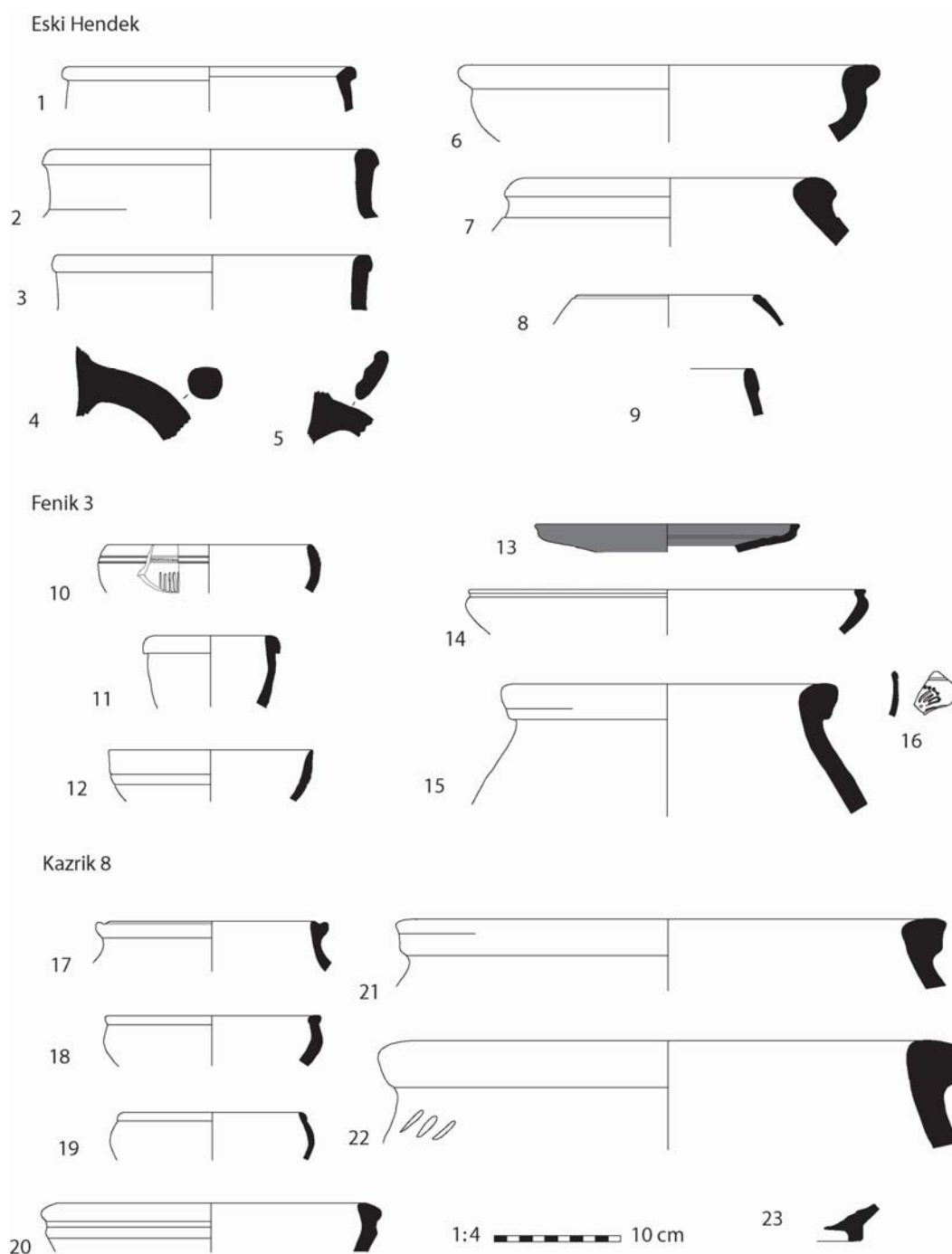


Figure 14. Ceramics from Eski Hendek and Near Eski Hendek # 1: 1-5 and 6-9, respectively; ceramics from the interior of Hellenistic/Parthian fortification at Fenik (Fenik # 3): 10-16; Parthian ceramics from Kazrik Boğazı #8: 17-23.

Sherd descriptions Figure 15

Period 1, Proto-Hassuna

1. Near Amarsava #1. Dark grey core grading to brown on exterior surfaces. Smooth, not burnished. Handmade. Coarse. Chaff very prominent.
2. Near Amarsava #1. Dark grey core. Chaff tempered. Exterior surfaces brown. Not burnished.
3. Near Amarsava #1. Chaff tempered. Grey core grading to brown on surfaces. Exterior smooth. Diameter unknown.
4. Hirbe Kotnuz. Chaff-tempered ware, grey core grading to brown on surfaces. Occasional scattered crushed limestone bits used as temper. Impressions on exterior surface made with bone, leaving visible internal ridge.
5. Amarsava, slopes of high mound. Friable; porous greenish clay, sand and chaff tempered, small and medium crushed limestone.
6. Nervan main terrace. Mixed chaff and grit (crushed limestone) temper. Greenish buff, heavy.
7. Near Takyan #2. Brown clay, chaff temper, occasional scattered white crushed limestone also used as temper.
8. Hirbe Kotnuz. Buff, chaff and crushed limestone grit. Exterior incised.
9. Nervan main terrace. Mixed chaff and grit temper, crushed limestone. Heavy on chaff, greenish buff.

Period 2, Samarra-related (?) Early Halaf from Basorin Höyük

10. Basorin, lowest levels on west terrace. Dense orange ware with numerous small-sized grits. Buff slip on both surfaces. Paint is brown.
11. Basorin, lowest levels on west terrace. Dense brownish buff clay. Small-sized white grits. Both surfaces covered with light buff slip. Orange/reddish paint, thickly applied.
12. Basorin, lowest levels on west terrace. "Dancing ladies" motif on interior rim surface. Greenish clay, dense with white grits. Paint is dark brown.

Period 1a and 1b, Proto Hassuna

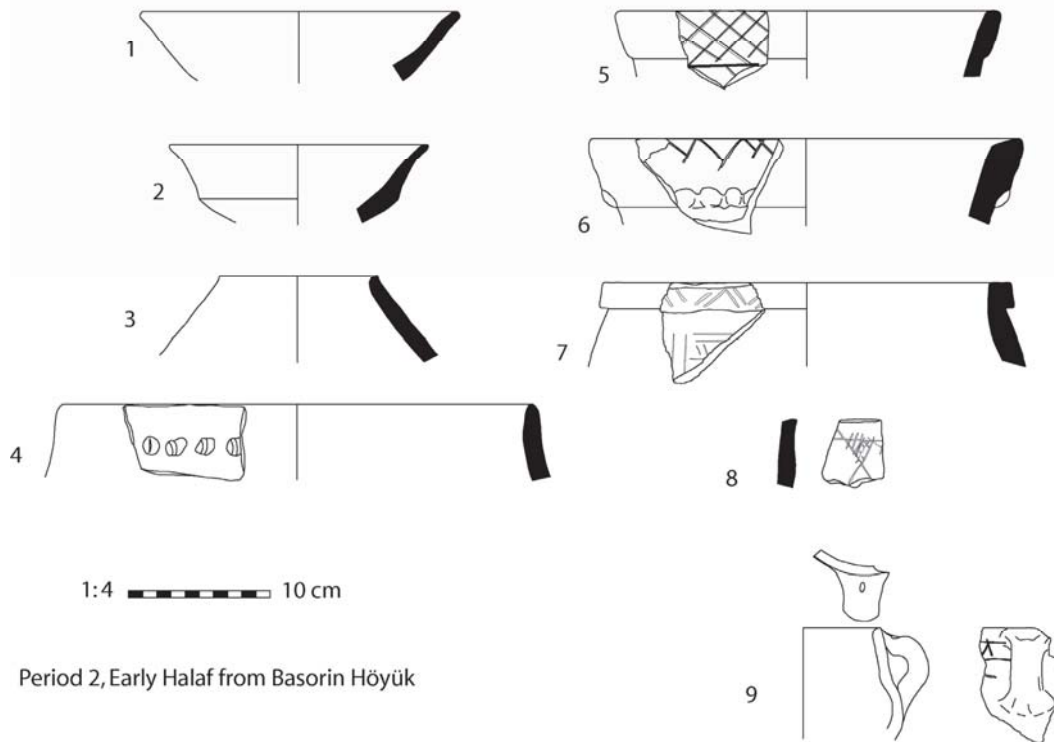


Figure 15. Periods 1a and 1b, “Proto-Hassuna” ceramics: 1-9;
Period 2, Early Halaf/Samarra-related ceramics from Basorin: 10-12.

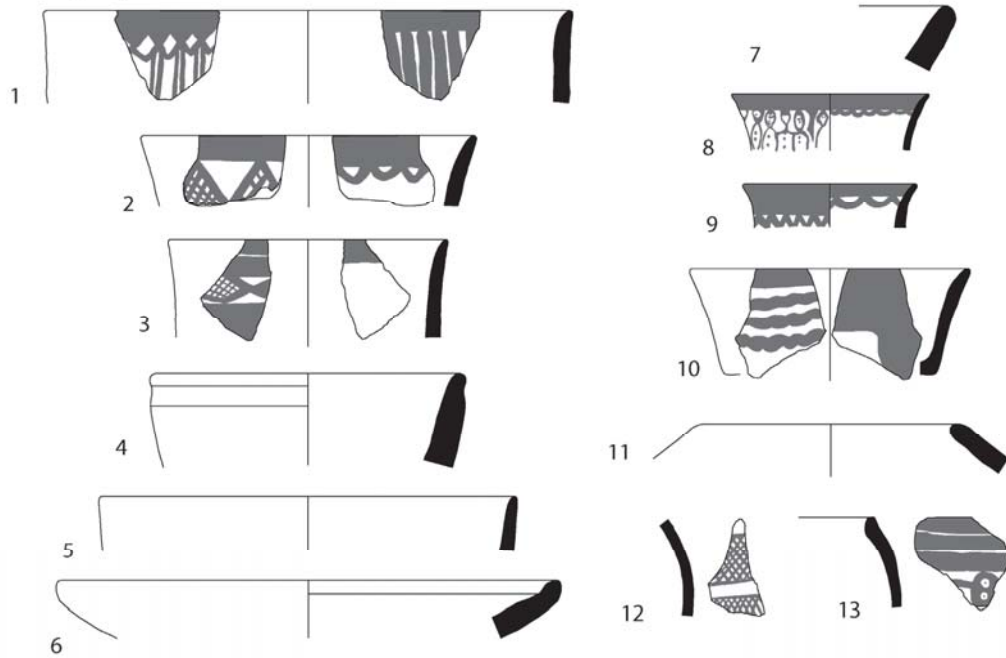
Sherd descriptions Figure 16*Period 2, Early Halaf from Near Nervan #1*

1. Near Nervan #1. "Dancing ladies" motif on interior rim surface. Brownish buff clay. Dense. No visible tempering but a few scattered white grits (limestone?) Paint is brown.
2. Near Nervan # 1. Reddish buff clay. Dense. No visible tempering other than scattered grey grits. Paint is red. External hatched lozenges.
3. Near Nervan # 1. Brownish buff clay. Dense. No visible tempering other than scattered small and big sized white grits (limestone). Paint is brown.
4. Near Nervan # 1. Brownish buff clay. Straw tempered coarse ware. Slip on both surfaces. Scattered white and grey inclusions.
5. Near Nervan # 1. Grey-ish buff clay. Straw tempered ware. Coarse. Slip on both surfaces. Scattered white and grey inclusions.
6. Near Nervan # 1. Brownish buff clay. Straw tempered ware. Coarse. Slip on both surfaces. Scattered white and grey inclusions. Fire smudging on exterior surface.
7. Near Nervan # 1. Brownish buff clay. Straw-tempered ware. Coarse. Slip on both surfaces. Scattered white and grey inclusions.
8. Near Nervan # 1. Pale brownish buff clay. Dense. No visible tempering other than scattered white grits (limestone?). Paint is brown.
9. Near Nervan # 1. Pale brownish buff clay. Dense. No visible tempering other than scattered small-sized white grits (limestone?) Paint is brown.
10. Near Nervan # 1. Pinkish buff clay. Dense. No visible tempering, other than scattered small-sized white grits (limestone?) and grey grits. Paint is red.
11. Near Nervan # 1. Hole-mouthed. Grayish-buff clay. Straw tempered ware. Coarse. Scattered grey inclusions. Fire smudging on both surfaces.
12. Near Nervan # 1. Brownish buff clay. Dense. Scattered grey grits and white grits (limestone?). Paint is brown.
13. Near Nervan # 1. Pale brownish buff clay. Dense. No visible tempering other than scattered small black grits. Paint is brown.

Period 2, Mid-Late Halaf from Takyan

14. Takyan Höyük. Pale brownish buff clay. Dense. No visible tempering other than scattered white grits. Brown and red paint.
15. Takyan Höyük. Pale brownish buff clay. Dense. No visible tempering. Paint is red.
16. Takyan Höyük. Yellowish buff clay. Dense. No visible tempering other than scattered small-sized grey grits. Paint is brown.
17. Takyan Höyük. Pale brownish buff clay. Dense. No visible tempering other than scattered white grits (limestone?). Paint is dark brown.
18. Takyan Höyük. Dense brownish buff clay. No visible tempering. Buff slip. Exterior reddish paint.
19. Takyan Höyük. Brownish buff clay. Dense. No visible tempering other than scattered small-sized white grits (limestone?). Paint is brown.
20. Takyan Höyük. Pale brownish buff clay. Dense. No visible tempering other than scattered grey grits. Paint is brown.
21. Takyan Höyük. Brownish buff clay. Dense. Brown paint.
22. Takyan Höyük. Pale brownish buff clay. Dense. No visible tempering other than grey grits. Paint is dark brown.
23. Takyan Höyük. Dark Faced Burnished Ware. Grey core, chaff temper grading to mottled grey/red, well-burnished exterior surface.
24. Takyan Höyük. Chaff temper. Occasional medium-sized sand/pebbles used as grit. Exterior surface smoothed, burned, and highly burnished.
25. Takyan Höyük. Grey core grading to orange on surfaces. Surface is smooth. Lightly burnished.
26. Takyan Höyük. Chaff tempered ware. Light grey core grading to brown on surface. Finely chopped chaff temper. Exterior and interior surfaces smoothed but not burnished. Seal impression on exterior.
27. Takyan Höyük. Pale brownish buff clay. Dense. No visible tempering. Paint is brown.

Period 2, Early Halaf



Period 2, Mid-Late Halaf

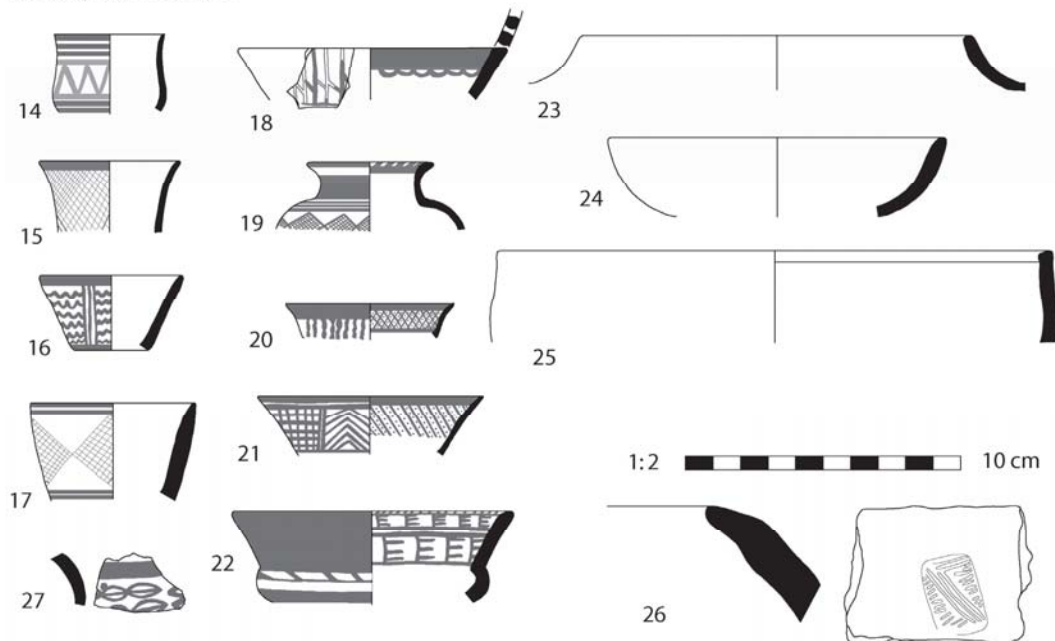


Fig. 16. Period 2, Early Halaf ceramics from Near Nervan # 1: 1-13; Mid-Late Halaf ceramics from Takyan: 14-25, 27; seal impressed coarse ware, hole-mouthed jar from Basorin: 26.

Sherd descriptions Figure 17*Period 3, Ubaid (plate 1)*

1. Kerpiç Höyük. Orange clay, chaff tempered, friable, a few small sized grits. Handmade.
2. Kerpiç Höyük. Chaff tempered clay. Brownish clay. Handmade. Some white grits also. Red wash over both surfaces.
3. Kerpiç Höyük. Coarse chaff tempered clay. Light buff clay, chaff imprints are numerous, exterior surface mottled orange in patches. Handmade.
4. Near Başköy #1. Orange buff clay. Small white grits. Buff slip on exterior. Paint is brown. Irregular wheel striations visible in interior.
5. Kerpiç Höyük. Coarse brownish buff straw tempered clay. Heavy straw tempering, but some white small grits also used as tempering.
6. Kerpiç Höyük. Dense, tempered with fine chaff and small white grits. Reddish clay, buff slip, exterior surfaces mottled orange in places.
7. Kerpiç Höyük. Coarse chaff tempered clay with prominent grey core grading to brown-buff on surfaces. Small white grits also visible. Brown paint.
8. Kerpiç Höyük. Chaff tempered clay with grey core. Small white grits also visible. Brown paint.
9. Near Başköy #1. Brownish buff gritty. Small white grits.
10. Near Başköy #1. Orange clay, small white grits. Buff slip exterior. Slightly irregular, handmade.
11. Kerpiç Höyük. Fairly dense orange buff clay. Occasional scattered white grits. Exterior surfaces buff slip. Paint is dark brown.
12. Kerpiç Höyük. Brownish buff clay. Small white grits. Painted brown.
13. Kerpiç Höyük. Brownish buff clay, small sized grits.
14. Near Başköy #1. Dense, brownish buff clay. Sand tempered.
15. Near Başköy #1. Chaff tempered. Occasional sand grits. Grey core grading to reddish on both surfaces. Surface impressed.

Period 3, Ubaid, plate 1

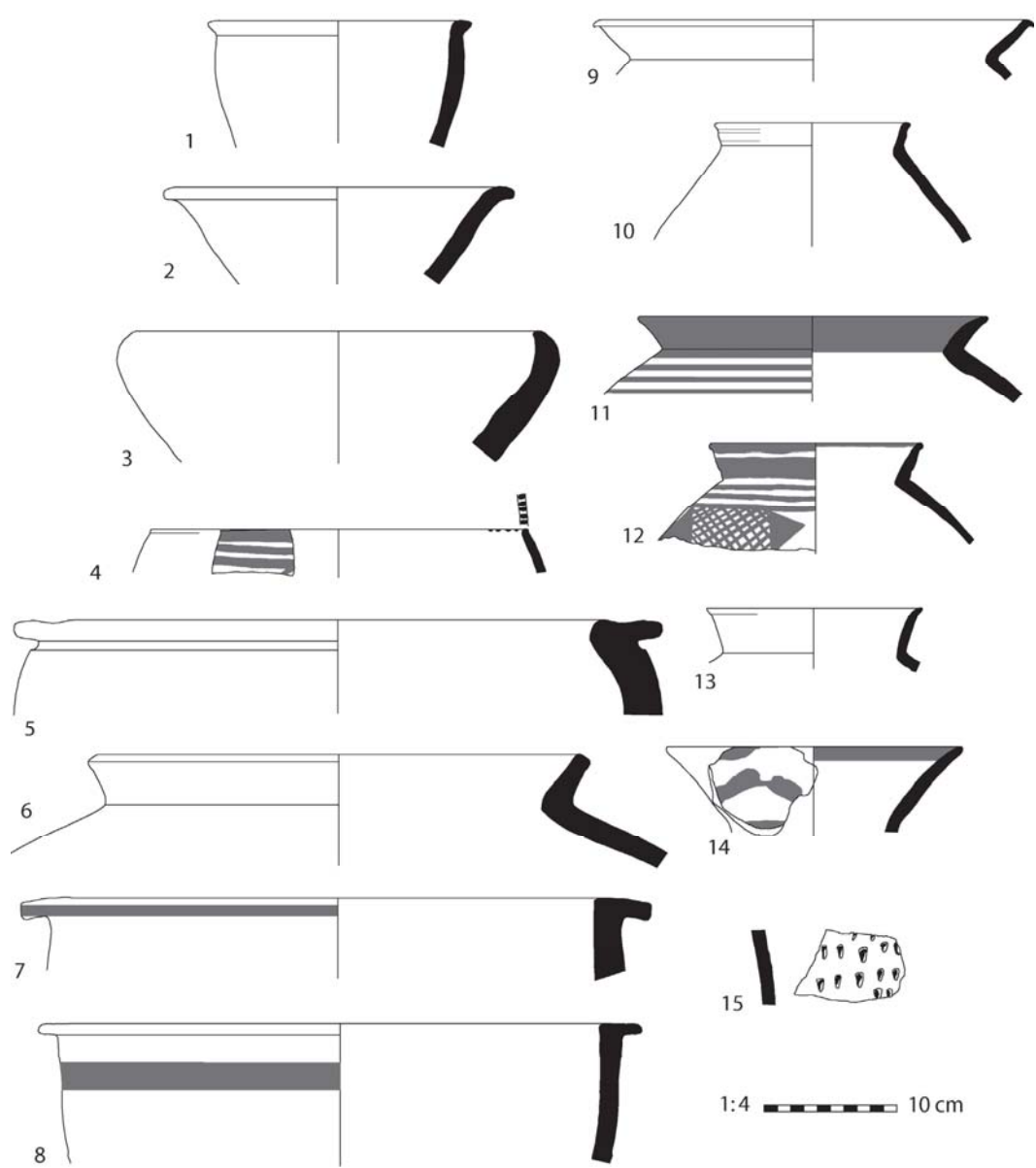


Fig. 17. Period 3, Ubaid ceramics from various Cizre-Silopi sites.

Sherd descriptions Figure 18*Period 3, Ubaid (plate 2)*

16. Near Başköy #1. Dense brownish buff. Minute white grits. Buff slip on exterior surface. Dark lines=red purple. Light lines=brown.
17. Kerpiç Höyük. Brown clay. Small chaff tempering and some white grits and also mixed tempers. Exterior surfaces red wash.
18. Near Başköy #1. Orange buff clay. Occasional large grey angular grits included in temper. Small white grits. Paint is orange exterior, brown interior.
19. Kerpiç Höyük. Dense grey clay grading to brown towards surfaces. Very small white grits, some chaff. Brown paint.
20. Near Başköy #1. Dense orange clay. Small white grits. Buff slip exterior. Wheel striations visible on interior surface.
21. Near Başköy #1. Pinkish buff clay. Small white grits.
22. Kerpiç Höyük. Brownish buff clay. Mixed fine chaff and small white grit tempers. No paint.
23. Basorin, bottom slopes of high mound. Dense greenish paste. No visible tempering. Purplish brown paint, thickly applied.
24. Basorin, bottom slopes of high mound. Small white grits, cream buff clay. Dense. Buff slip. Exterior paint is brownish red.
25. Near Başköy #1. Pinkish buff clay, small-sized white grits. Handmade, slightly irregular. Exterior buff slip, smooth.
26. Kerpiç Höyük. Dense brown clay, numerous small white grits. Painted brown band.
27. Near Takyan 3. Dense brownish buff clay. Occasional small white grits.
28. Gire Tahti. Sprig ware. Dense reddish orange clay, red wash on interior surface, exterior brown paint overall. Small white grits.
29. Revini south. Sprig ware. Red brick clay, porous, minute white grits, exterior surface bright orange, reddish black paint.

Period 3, Ubaid, plate 2

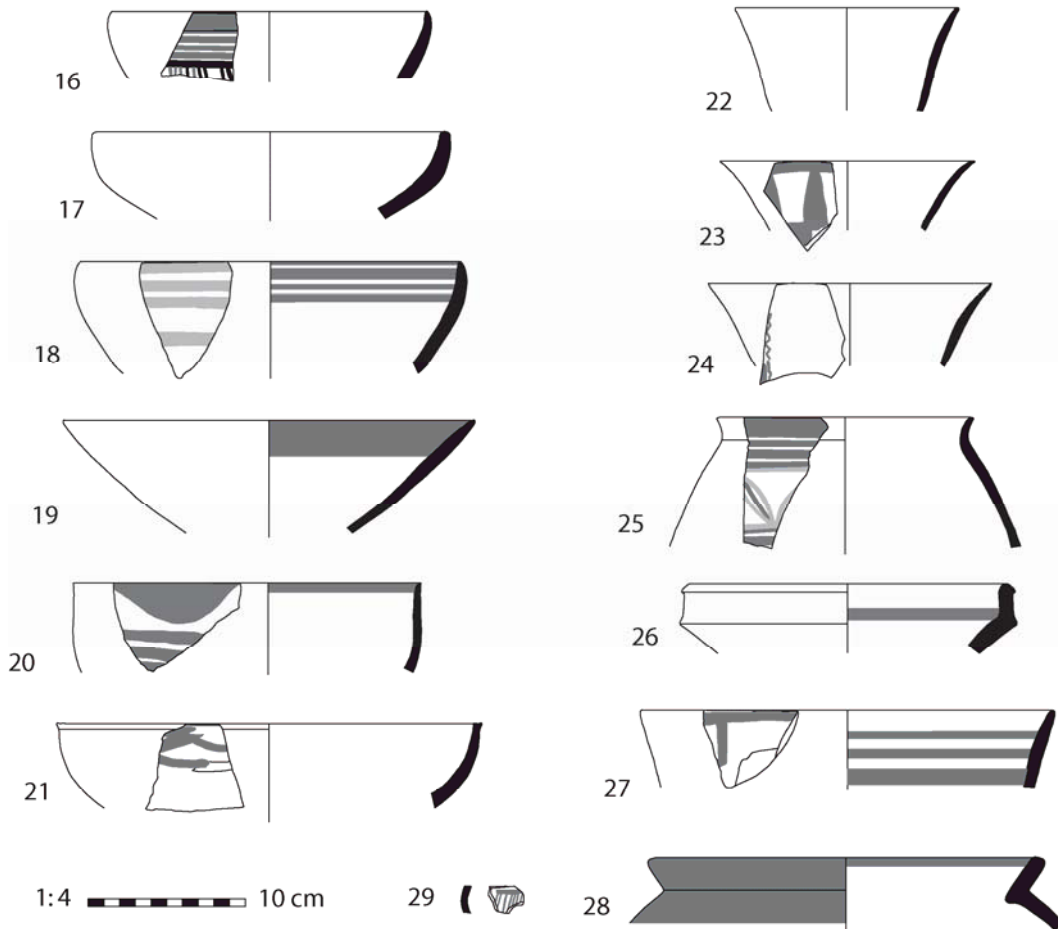


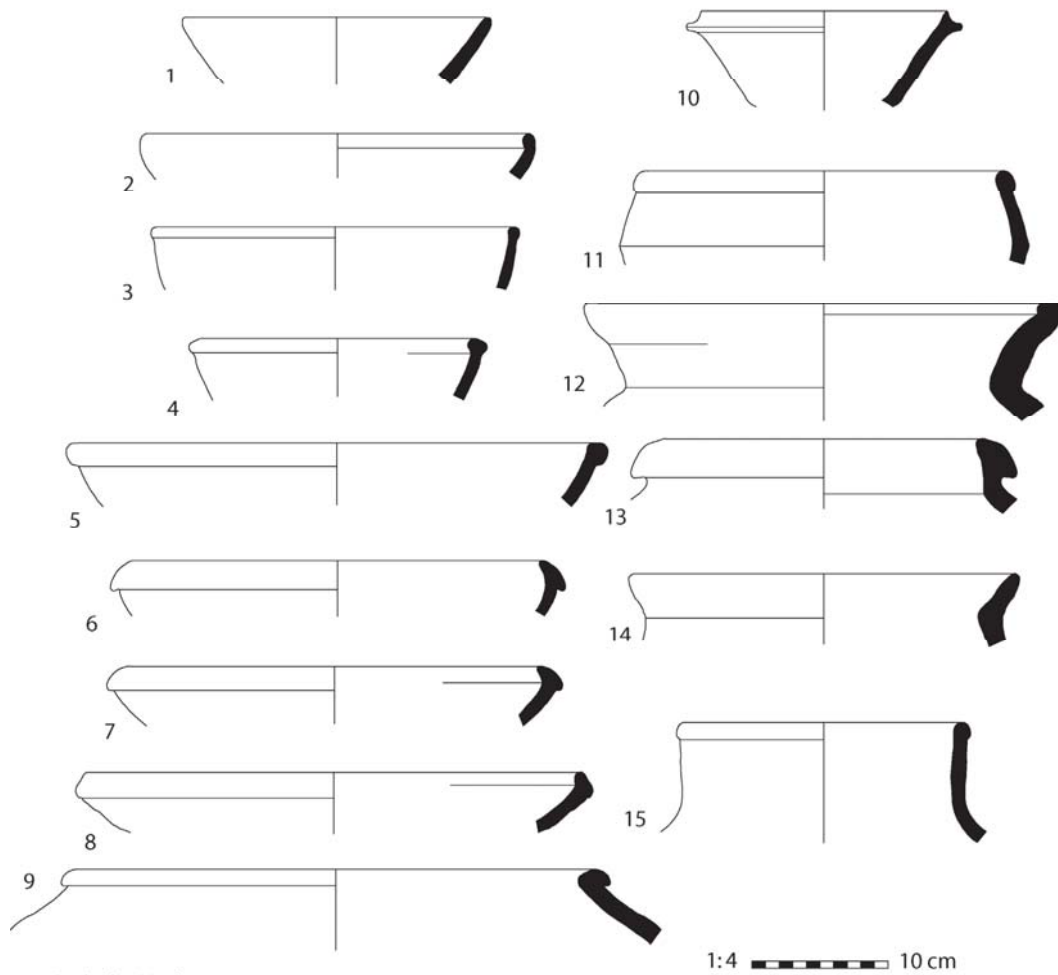
Fig. 18. Period 3, Ubaid ceramics from various Cizre-Silopi sites: 16-26;
 “Sprig” Ware ceramics from various Cizre-Silopi sites: 27-28.

Sherd descriptions Figure 19

Period 4, Late Chalcolithic and Uruk

1. Near Gundihadit #1. 'Amuq F. Orange clay, heavy chaff temper.
2. Near Takyan 3. Dense chaff-tempered clay. Grey core, grading to brown on surfaces.
3. Near Gundihadit #1. 'Amuq F. Dense mixed tempered clay. Both chaff and small white grits used as tempering. Orange clay.
4. Near Gundihadit. 'Amuq F. Brownish clay. Grey core. Chaff tempered.
5. Near Takyan 3. Grey clay, chaff tempered. Medium white angular grits prominent. Diameter could be larger.
6. Near Gundihadit #1. 'Amuq F. Orange clay with grey core. Chaff tempered. Occasional small-medium white angular grits.
7. Near Takyan 3. Brown clay, heavily chaff tempered. Grey core.
8. Near Takyan 3. Brown clay. Grey core. Heavily chaff tempered. Scattered medium white grits.
9. Rubaikale. Late Chalcolithic casserole. Brownish clay, chaff tempered, grey core.
10. Rubaikale. Bevelled-rim bowl. Grey core. Brownish clay, chaff tempered.
11. Near Gundihadit #1. 'Amuq F. Brownish buff clay. Chaff temper.
12. Basorin. Dense waster greenish clay with small sized grits. Oven fired with cracks from firing and burnt area, bubbles.
13. Rubaikale. Late Chalcolithic. Brownish buff, grey core, chaff, some white grits.
14. Near Takyan 3. Brown clay, chaff tempered. Coarse, handmade.
15. Basorin Höyük. Late Chalcolithic, 'Amuq F. Chaff tempered, grey core grading to brown on surface. Occasional white grits, small and medium.
16. Rubaikale. Bevelled-rim bowl. Vegetable tempered clay. Grey core grading to orange on surfaces. Exterior surface typically rough. Interior smooth.
17. Rubaikale. Uruk conical cup. Orange buff clay. Small sized white grits. Traces of wheel striations on external surface.
18. Rubaikale. Conical cup base. Dense red brick clay; scattered small sized white grits. Fast wheel striations visible on interior surface. String cut base.
19. Basorin Höyük. Orange buff clay. Small sized grits, white. Exterior surface is orange and flint scraped on exterior below juncture of neck and body.
20. Basorin Höyük. Uruk conical cup. Brownish buff clay, small white grits. Traces of fast wheel striations visible on interior and exterior surfaces.

Period 4, Late Chalcolithic



Period 4, Uruk

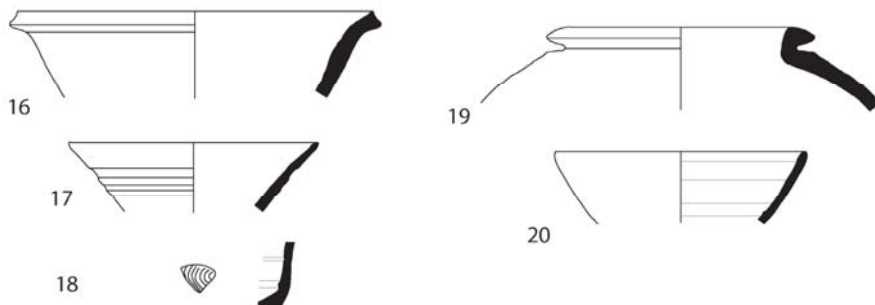


Fig. 19. Period 4a, Late Chalcolithic ceramics from various Cizre-Silopi sites: 1-15;
Period 4b, Middle-Late Uruk ceramics from Rubaikale and Basorin: 16-20.

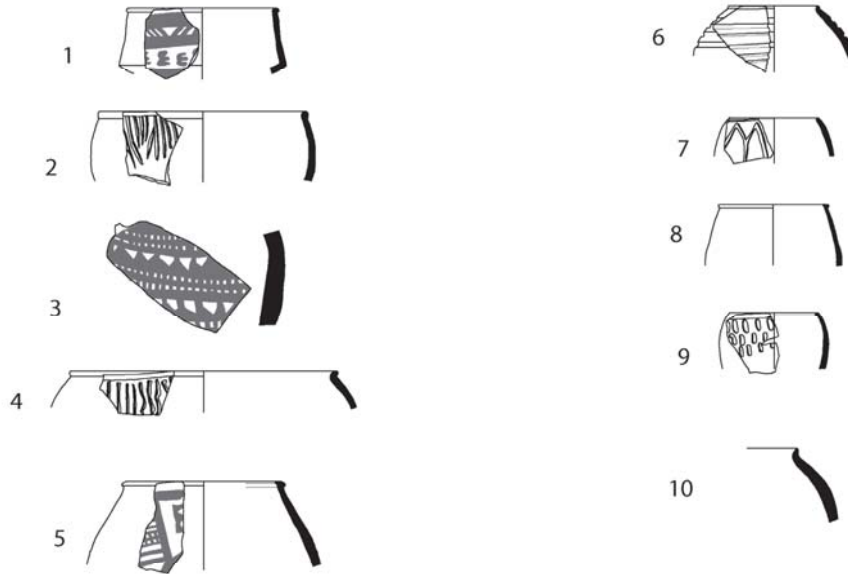
Sherd descriptions Figure 20*Period 5, Ninevite V*

1. Rubaikale. Dense greenish clay, overfired. Paint is brown/black.
2. Rubaikale. Buff clay, dense, no visible tempering. Traces of fine wheel striations in interior. Incised design.
3. Rubaikale. Ninevite 5. Buff, sandy, brown paint.
4. Rubaikale. Fine greenish clay, no visible temper.
5. Rubaikale. Olive green clay, overfired, small white grits. Dark brown paint.
6. Rubaikale. Fine grey. No visible temper.
7. Rubaikale. Dense grey clay, no visible temper. Fine wheel striations visible on interior surface.
8. Rubaikale. Pinkish buff, no visible temper. Fine wheel striations visible on interior and exterior surfaces.
9. Rubaikale. Dense greenish clay, no visible temper. Wheel striations visible on interior surface.
10. Basorin, lowest slopes of high mound. Dense orange clay. No visible temper. Exterior surface greenish buff slip.

Period 6, Mid-Late Third Millennium

11. Basorin Höyük. Dense reddish clay, small-sized white grits. Some traces of very fine chaff as well. Exterior surface covered with light greenish buff slip.
12. Basorin Höyük. Metallic-like ware. Dense grey clay with minute white grits. Exterior surface is grey and clinky. On interior surface indications of wheel striations (fast).
13. Basorin Höyük. Porous greenish buff clay with minute white grits and numerous small air bubbles in clay. Punctated and incised.
14. Mehmetçik Tepe. Porous greenish clay, sand tempered. Slightly overfired. Punctated and incised.

Period 5, Ninevite V



Period 6, Mid-Late Third Millennium

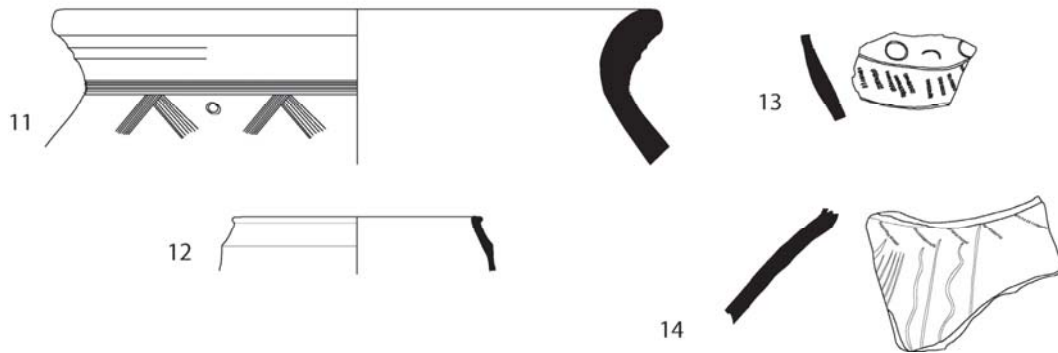
1:4  10 cm

Fig. 20. Period 5, Ninevite V ceramics from various Cizre-Silopi sites: 1-10;
Period 6, Mid-Late Third Millennium Ceramics from Basorin and Mehmetçik: 11-14.

Sherd descriptions Figure 21*Period 7, Middle Bronze Age, Old Assyrian (plate 1)*

1. Nervan SE mound. Grey core grading to brown towards surfaces. Numerous, prominent medium-large-sized angular white and grey grits.
2. Nervan SE mound. Grey core grading to brown towards surfaces. Numerous, prominent medium-large-sized angular white and grey grits.
3. Nervan. Fairly dense orange clay. Small to medium-sized white grits, buff slip on exterior surface. Diameter could be larger.
4. Nervan. Brownish buff clay, small-sized white grits, buff slip surfaces.
5. Nervan SE Mound. Light greenish buff clay, small sandy grits. Painted brown.
6. Nervan SE mound. Grey core grading to brown towards surfaces. Numerous, prominent medium-large-sized angular white and grey grits.
7. Nervan SE mound. Orange clay, white grits, some chaff also used as tempering. Buff slip on exterior.
8. Nervan SE mound. Orange clay, small white grits, buff slip on exterior.
9. Nervan S Mound. Dark brownish clay grading to lighter brown on surfaces. Numerous, prominent medium-large white and grey angular grits. Diameter unknown.
10. Nervan SE mound. Grey core grading to brown towards surfaces. Numerous, prominent medium-large-sized angular white and grey grits. Diameter unknown.
11. Nervan, SE Mound. Light greenish buff clay, small white grits.
12. Near Takyan 3. Khabur ware. Buff, sandy and white grits. Brown paint.

Period 7, Middle Bronze Age, plate 1

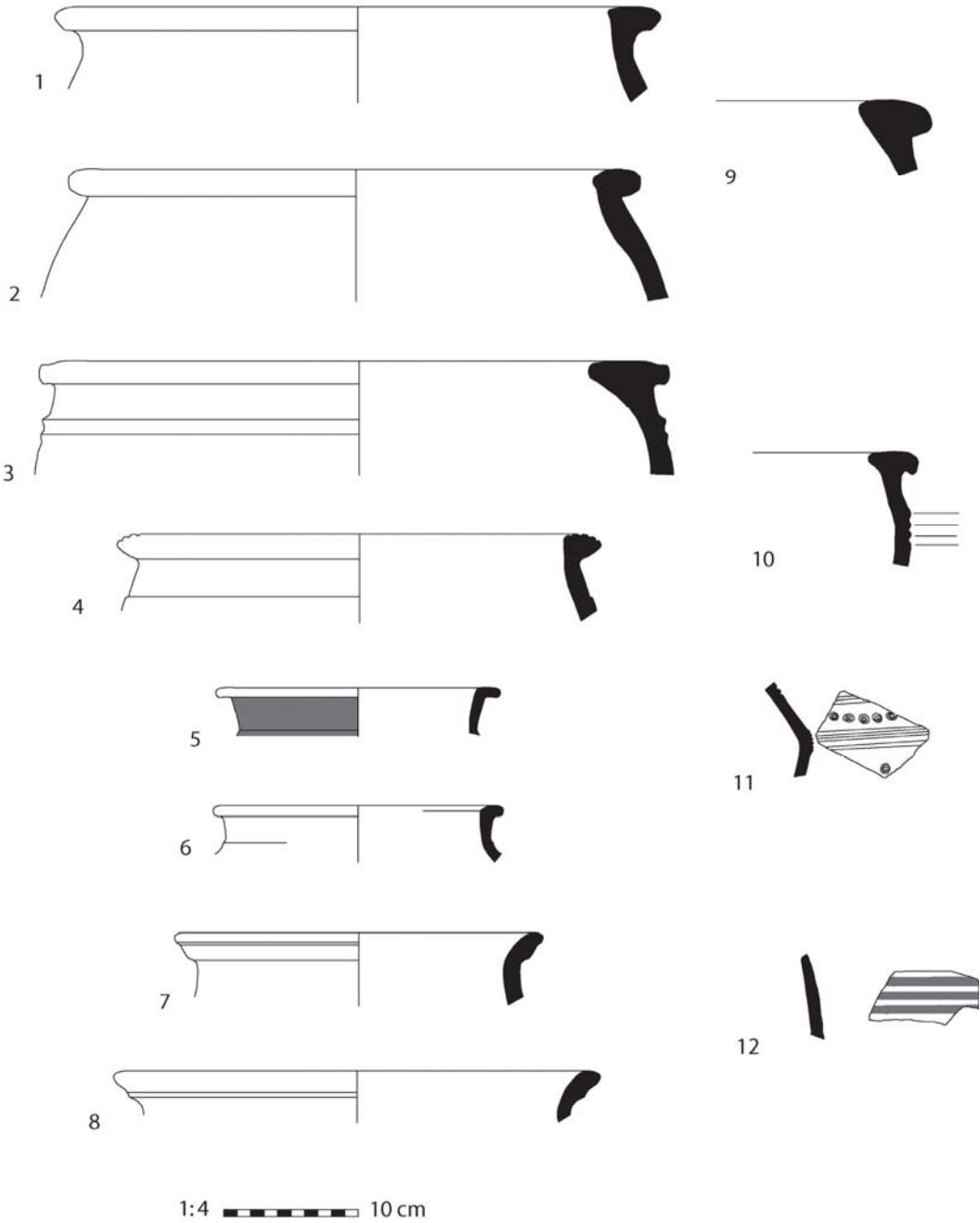


Fig. 21. Period 7, Middle Bronze Age/Khabur Ware ceramics from Nervan and other Cizre-Silopi sites.

Sherd descriptions Figure 22*Period 7, Middle Bronze Age, Old Assyrian (plate 2)*

13. Nervan SE mound. Brownish buff clay grading to orange on exterior surface. Small white grits.
14. Nervan high mound. Light greenish buff clay, sandy tempering with some white grits also visible. Brown paint.
15. Nervan high mound. Greenish clay, overfired, slightly misshapen. Tempered with both sand and white grits.
16. Nervan high mound. Fairly dense brownish buff clay, small white grits. Orange/brown paint.
17. Nervan high mound. Greenish overfired clay, small white grits. Diameter could be larger.
18. Nervan S Mound. Dark browish clay grading to lighter brown on surfaces. Numerous, prominent medium-large white and grey angular grits.
19. Nervan SE Mound. Orange clay. Small white grits, buff slip, surface paint is brown.
20. Nervan SE Mound. Brownish buff clay, small white grits. Light greenish buff slip on surface. Paint is dark brown.
21. Nervan, SE Mound. Greenish buff clay very small-sized grits.
22. Nervan, SE Mound. Overfired greenish clay. No visible tempering. Warped.
23. Nervan SE mound. Dense greenish clay, sandy grits.
24. Nervan, SE Mound. Brownish buff clay, small white grits, greenish buff slip on exterior surface.
25. Nervan, SE Mound. Dense brownish ware. Occasional scattered white grits. Light greenish slip on exterior.
26. Nervan, SE Mound. Dense greenish clay. Small-sized white grits. Slight undulations on interior surface. Hard greenish variant.
27. Nervan SE Mound. Orange clay. White grits. Painted red and red/orange.

Period 7, Middle Bronze Age, plate 2

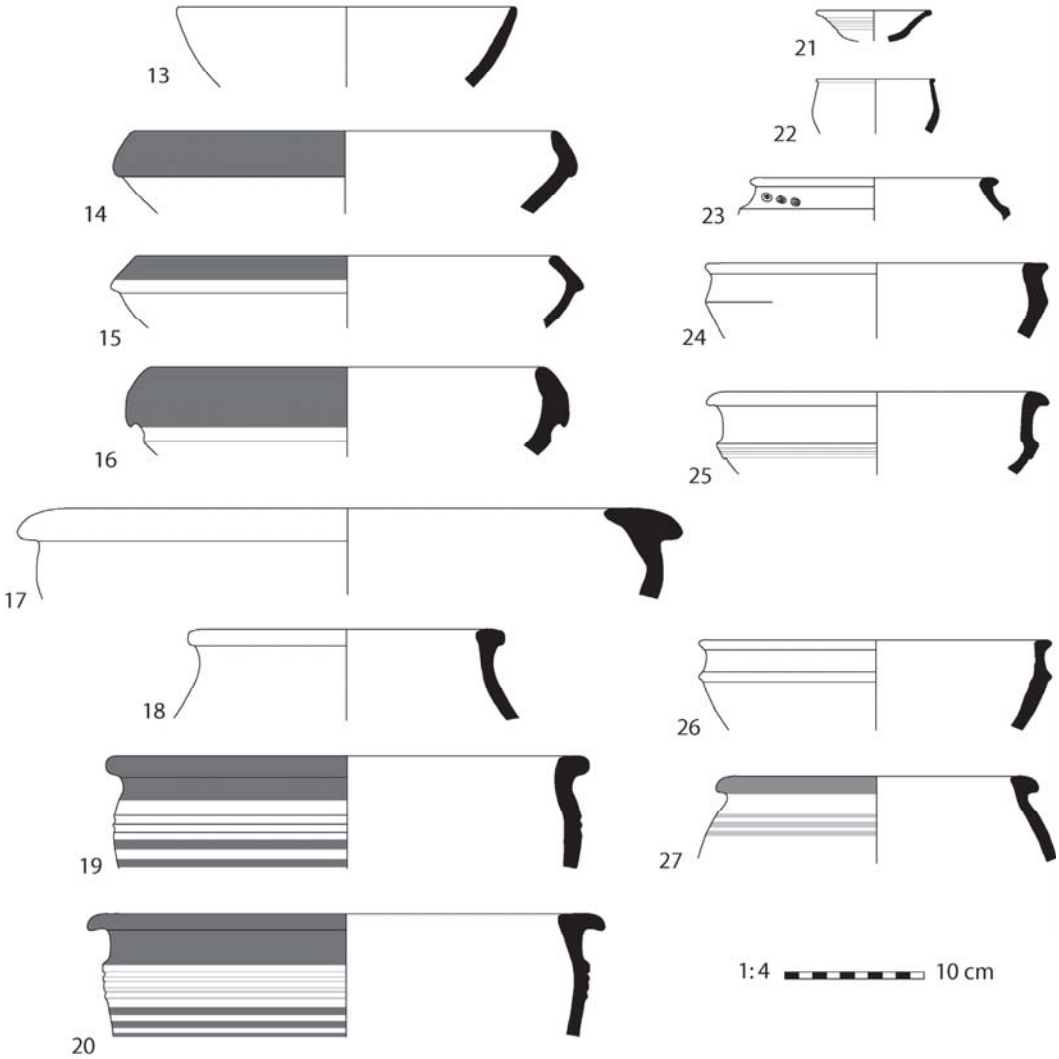


Fig. 22. Period 7, Middle Bronze Age/Khabur Ware ceramics from Nervan.

Sherd descriptions Figure 23*Period 8, Late Bronze Age, Mitannian/Middle Assyrian*

1. Nervan Höyük. Square rimmed jar. Reddish exterior surface, brown clay with many visible white grits. Grit temper.
2. Köpik Höyük. Square rimmed jar. Orange exterior grading to black at core with many chaff impressions. Grit and chaff temper. Diameter uncertain.
3. Basorin Höyük. Dense orange clay with small white grits. Traces of fast wheel marks at base. Grit temper.
4. Basorin Höyük. Orange clay with very small grits. Traces of fast wheel marks at base. Grit temper.
5. Gre Hazale. Yellowish buff clay with sand and white grits used as temper.
6. Gre Hazale. Reddish clay with both chaff and medium white grits used as temper. Buff slip on exterior surface.
7. Nervan Höyük. Brown, grit tempered clay.
8. Gre Musto. Red-brown clay. Mixed chaff and grit temper, but chaff is predominant.
9. Basorin Höyük. Light buff clay. Dense fine chaff temper.
10. Basorin Höyük. Orange-brown clay grading to gray at core. Mixed chaff and grit temper, but chaff is predominant.
11. Gre Hazale. Yellowish-buff clay. Mixed chaff and grit temper, but chaff is predominant.
12. Basorin Höyük. Red-brown clay with tan slip on surface. Fine grit temper.
13. Alişama Höyük. Grey clay. Fine grit temper.
14. Gre Hazale. Yellowish clay on exterior grading to reddish brown at core. Chaff tempered.
15. Gre Hazale. Yellowish clay on exterior grading to yellowish-brown at core. Chaff tempered.
16. Gre Musto. Light buff clay. Sand and small white grits used as temper.
17. Basorin Höyük. Nuzi goblet. Thin, clinky. Tan buff clay, minute white grits. Paint band is brown.
18. Basorin Höyük, slopes of south terrace. Nuzi goblet. Dense grey ware, no visible tempering other than a few scattered minute white grits. Exterior surfaces buff slip. Paint is brown.
19. Basorin Höyük. Nuzi Ware. Dense, yellowish buff clay, small white grits. Exterior and interior surfaces covered with buff slip. Paint is brown, reddish brown where thin, dark brown where thickly applied. Motif (bird's head) done in white.

Period 8, Mitannian/Middle Assyrian

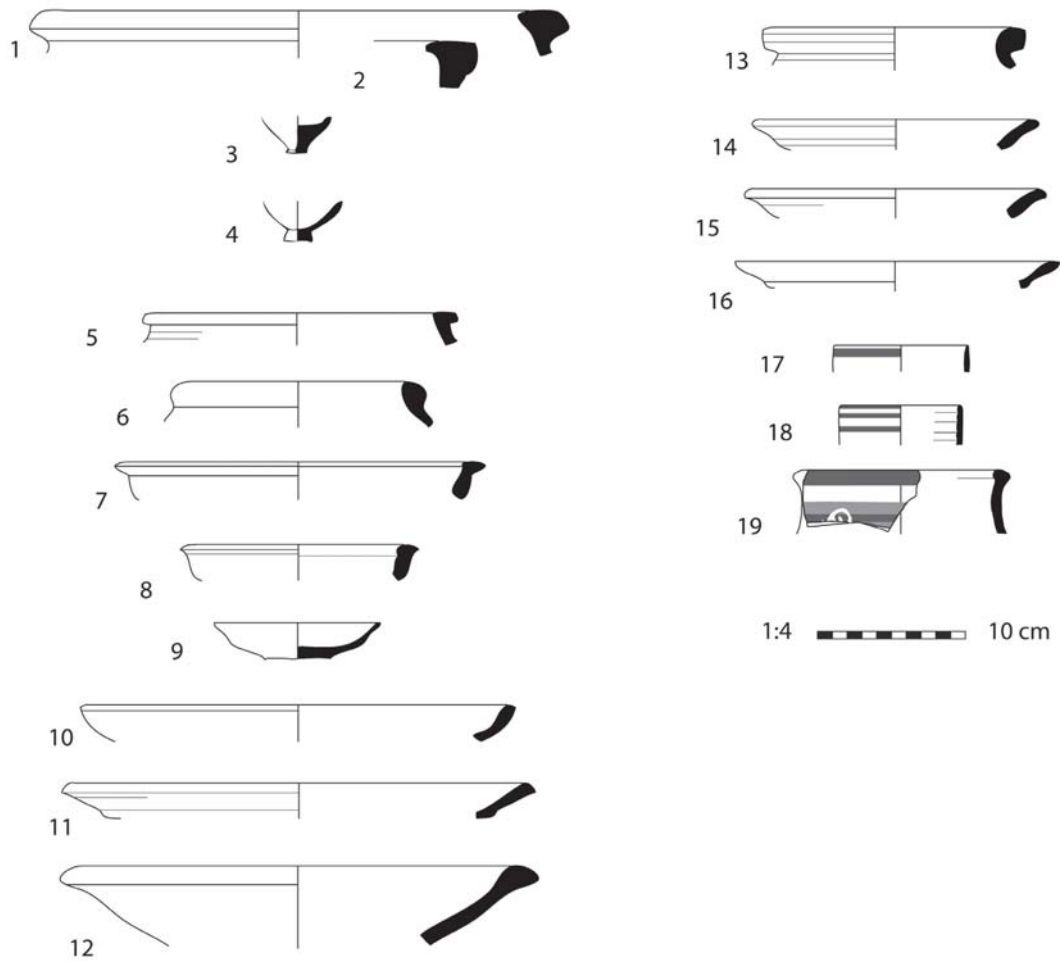


Fig. 23. Period 8, Mitannian and Middle Assyrian ceramics from various Cizre-Silopi sites: 1-16; Mitannian ceramics from Basorin: 17-19.

Sherd descriptions Figure 24*Period 9, Iron Age/Late Assyrian*

1. Takyan Höyük. Brown clay. Mixed chaff and grit temper.
2. Yankale Höyük. Orange clay with buff slip on exterior. Dense mixed chaff and grit temper.
3. Silopi Höyük. Brown clay grading to buff on exterior surface. Mixed chaff and grit temper.
4. Köpik Höyük. Brown clay grading to buff on exterior surface. Mixed chaff and grit temper.
5. Takyan Höyük. Dense light grey care with burnished exterior surface. Chaff temper.
6. Takyan Höyük. Dense brown clay grading to buff on exterior surface.
7. Gre Hazale. Brown clay grading to buff on exterior surface. Small white grits used as tempering.
8. Takyan Höyük. Brown clay grading to gray at core. Chaff temper.
9. Silopi Höyük. Brown clay. Mixed chaff and grit temper.
10. Girik Tahti. Dense brown clay grading to lighter brownish buff on surfaces. Occasional white grits.
11. Girge Mera. Orange clay. No visible tempering.
12. Köpik Höyük. Light brown clay grading to buff on exterior surface. Mixed chaff and grit temper.
13. Girge Mera. Brownish buff clay. No visible temper.
14. Girge Mera. Dense gray clay grading to brown on surface. Chaff temper.
15. Girge Miçüero. Pinkish clay with buff exterior surface. White angular grits.
16. Yankale Höyük. Dense greenish clay with no visible tempering. Warped during firing.
17. Girge Miçüero. Brown clay. Small white grits.
18. Silopi Höyük. Brown clay. Medium-sized white grits.

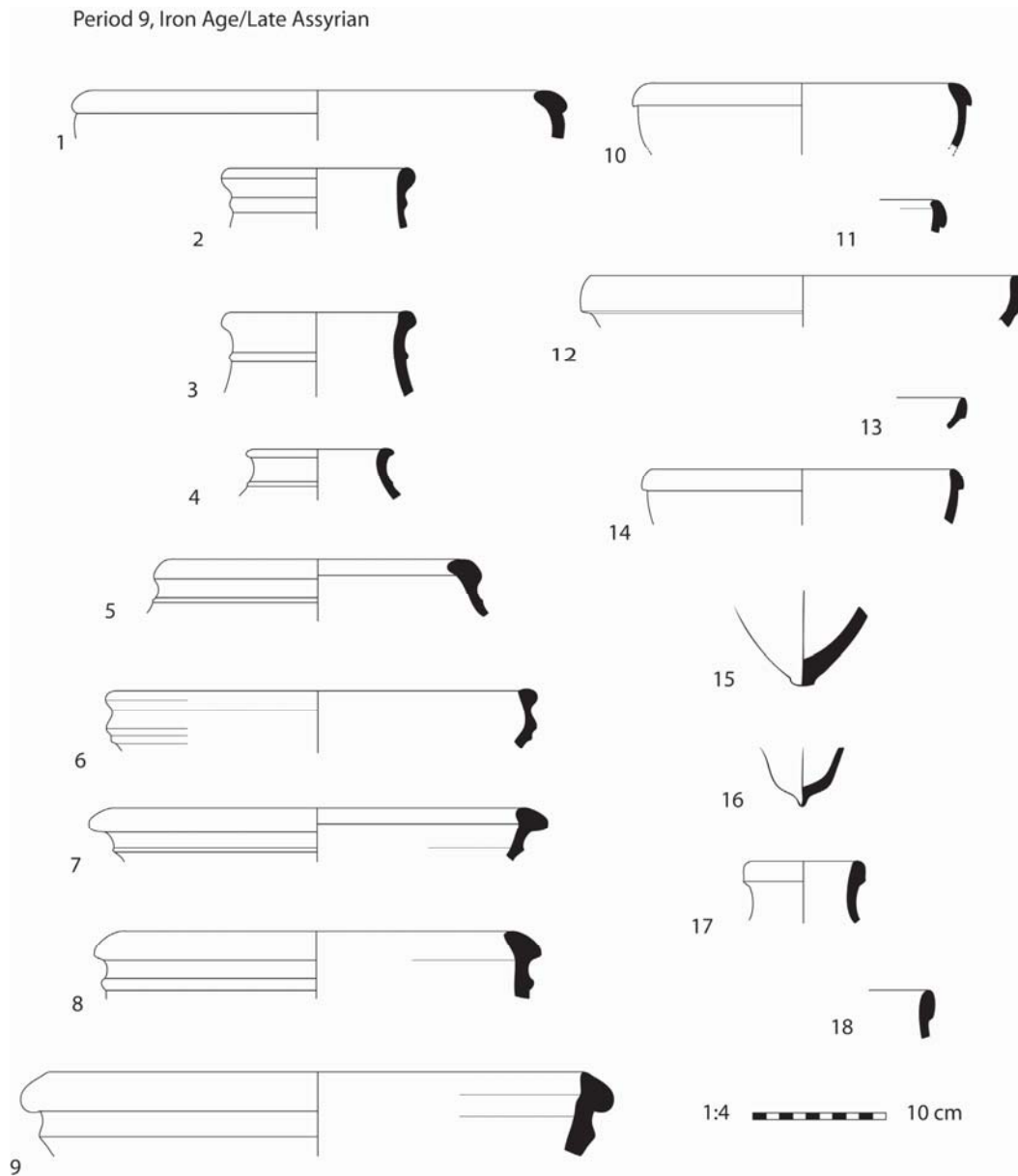


Fig. 24. Period 9, Iron Age/Late Assyrian ceramics from various Cizre-Silopi sites.

Sherd descriptions Figure 25*Period 9, Iron Age/Late Assyrian*

1. Takyan Höyük. Orange clay. Small white grits.
2. Silopi Höyük. Brown-buff clay grading to gray at core. Mixed tempering: fine chaff and scattered medium and large sized grits.
3. Takyan Höyük. Orange clay grading to gray at core. Mixed tempering: fine chaff and scattered white grits.
4. Yankale Höyük. Red brown clay, chaff tempered.
5. Takyan Höyük. Dense brown clay grading to gray at core. Mixed chaff and grit temper.
6. Yankale Höyük. Dense orange clay. Very fine chaff temper.
7. Mehmetçik Höyük. Red-brown clay grading to gray at core. Mixed chaff and grit temper.
8. Takyan Höyük. Dense brown clay. Mixed chaff and grit temper.
9. Yankale Höyük. Orange buff clay. Mixed chaff and grit temper.
10. Mehmetçik Höyük. Reddish-brown clay. Mixed chaff and grit temper.
11. Amarsava Höyük. Orange-brown clay. Mixed chaff and grit temper.
12. Near Şürik Dere #1. "Palace" Ware; Reddish clay with no visible tempering. Buff slip on exterior surface.
13. Silopi Höyük. "Palace" Ware; Light-brown buff clay. No visible tempering.

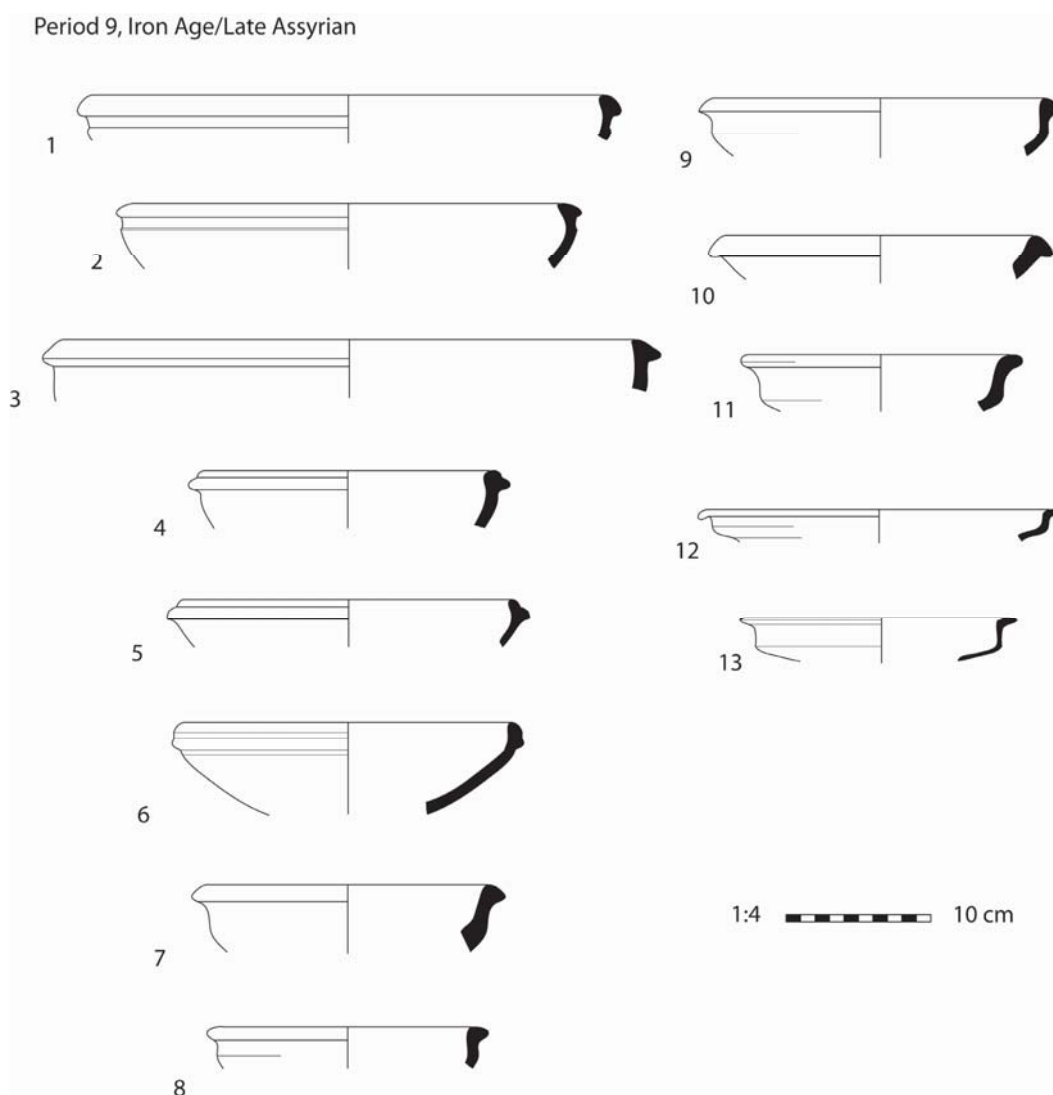


Fig. 25. Period 9, Iron Age/Late Assyrian ceramics from various Cizre-Silopi sites.

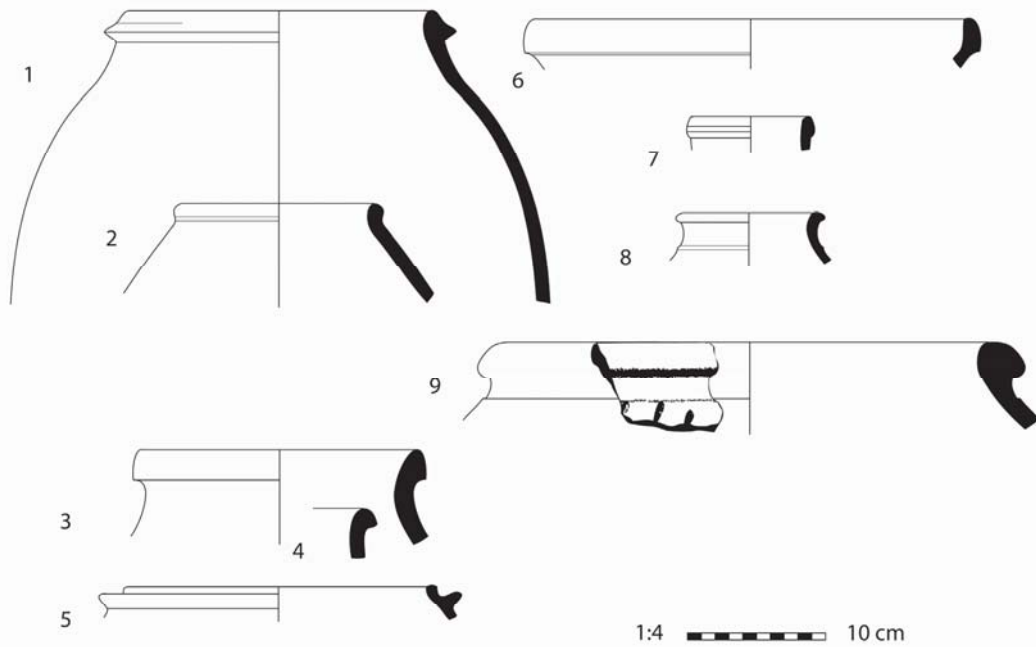
Sherd descriptions Figure 26*Period 9, Late Iron Age ceramics from Kopik Höyük*

1. Brownish-buff clay with sand temper.
2. Brown clay grading to buff on exterior. Chaff temper. Blackened on inside.
3. Dense brown clay grading to buff on exterior. Small white grits.
4. Reddish-brown clay with brownish buff slip on exterior. Fine grit temper.
5. Reddish-brown clay with buff slip on exterior. Medium and large white grits.
6. Porous light brown clay with buff exterior surface. Mixed chaff and grit temper.
7. Light brown clay with grit temper.
8. Brown clay with buff exterior surface. Medium and large white grits.
9. Brown clay with buff exterior surface. Large mixed grits used as tempering.

Period 10, Post-Assyrian

10. Ilıcalar Höyük. Brown clay grading to grey at core. Grit and chaff temper.
11. Nervan Höyük, High Mound. Tan-brown exterior surface grading to light brown at core. Roughly made with chaff and grit temper.
12. Gre Musto. Gray clay with white grit temper.
13. Alişama Höyük. Dense red clay with small white grits. Buff exterior. Sand temper.

Period 9, Iron Age Ceramics from Kopik Höyük



Period 10, Post-Assyrian (?)

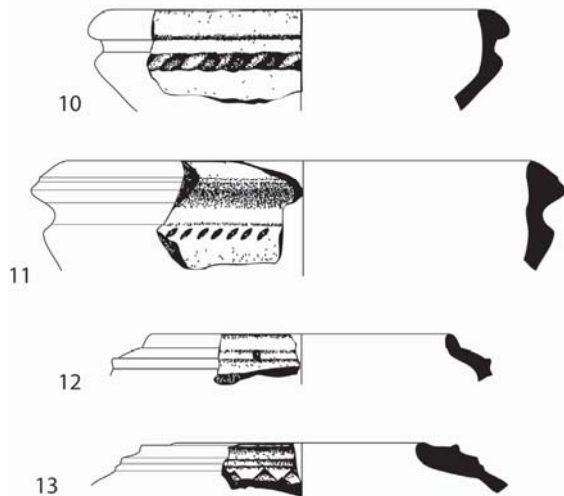


Fig. 26. Period 9, Late Iron Age ceramics from Kopik Höyük: 1-9;
Period 10, Post-Assyrian (?) ceramics from various Cizre-Silopi sites: 10-13.

Sherd descriptions Figure 27*Period 11, Hellenistic*

1. Hasan Tartar Höyük. Coarse brown clay. Medium to large white angular grits. Brown paint interior and exterior.
2. Basorin, slopes of west terrace. Brown clay, porous. Sand temper, brown wash/slip on upper part of exterior surface. Red slip on lower part of exterior surface and interior surface.
3. Girge Musto. Parthian fish bowl. Light greenish-cream glaze, partly vitrified. Greenish clay, sandy.
4. Basorin, slopes of west terrace. Dense tan clay, sand temper, brown slip on upper part of exterior surface, red slip on lower part of exterior surface and interior surface.
5. Gre Hazale. Brownish buff clay, white grits, brown paint interior and upper exterior.
6. Hasan Tartar Höyük. Dense brownish buff clay, small white grits, fast wheel marks inside. Exterior buff slip.
7. Girge Miçüero SE spur. Dense brownish buff clay, occasional scattered small white grits.
8. Girge Miçüero. Pinkish ware, small white grits. Interior covered with red wash, mottled grey from fire?
9. Hasan Tartar Höyük. Exterior red wash.
10. Near Takyan #4. Hellenistic Megarian Ware. Dense tan clay, minute white grits. Brown wash on exterior surfaces.
11. Hasan Tartar Höyük. Brownish buff clay, small white grits.
12. Hasan Tartar Höyük. Dense grayish buff clay. Scattered medium-sized white grits. Buff slip on exterior surfaces.
13. Hasan Tartar Höyük. Hellenistic stump base. Reddish clay, coarse with numerous large grey angular grits. Also small white grits. Buff slip on exterior surfaces.
14. Hasan Tartar Höyük. Brownish buff clay, medium-large white grits, coarse, gritty. Bitumen smears on exterior and interior surfaces.

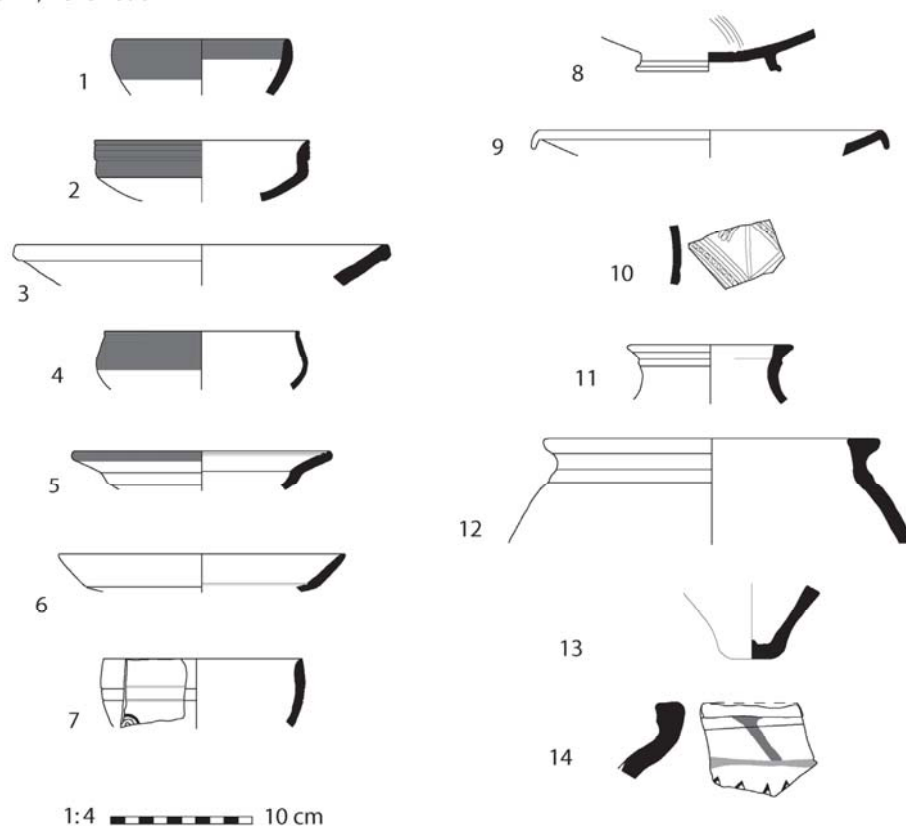
Period 12, Parthian

15. Hasan Tartar Höyük. Parthian. Greenish buff clay. Sandy exterior, interior covered with greenish blue metallic glaze, exterior crackled. Base exterior also glazed.
16. Girge Musto. Greenish-buff clay. Medium angular white grits, sandy, overfired.
17. Girge Miçüero. Gray-buff clay, sand tempered.

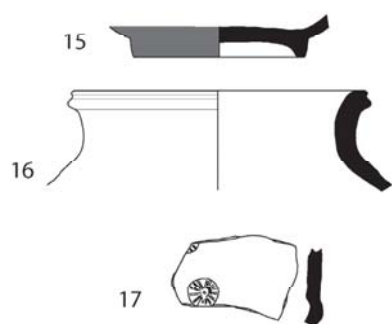
Period 11/12, Hellenistic/Parthian

18. Near Takyan #4. Tan clay, porous. Sand tempered, medium-sized red grits visible throughout.
19. Near Girge Miçüero # 1. Reddish clay, small and large angular white grits.
20. Girge Miçüero. Buff, gritty. Sand and white grits.
21. Bimrim, second terrace. Buff clay, sand and grit tempered.

Period 11, Hellenistic



Period 12, Parthian



Period 11/12, Parthian and Hellenistic/Parthian

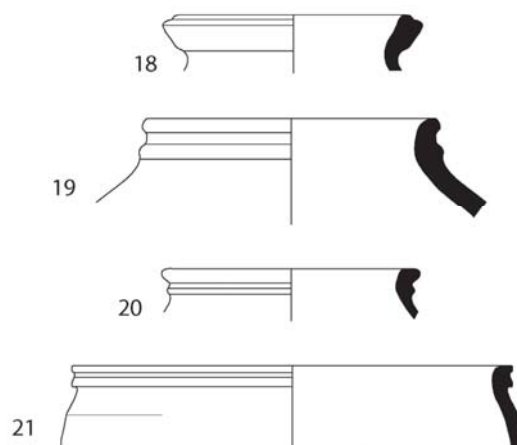


Fig. 27. Period 11, Hellenistic ceramics from various Cizre-Silopi sites: 1-14;
 Period 12, Parthian ceramics from various Cizre-Silopi sites: 15-17;
 Period 11/12, Hellenistic/Parthian ceramics from various Cizre-Silopi sites: 18-21.

Sherd descriptions Figure 28

Period 13, Late Roman

1. Basorin Höyük. Roman “Brittle” Cooking Pot Ware. Red brick clay with slight grey core. Small-sized white grits. Possibly some vegetal tempering too. Traces of handle (?).
2. Basorin Höyük, high mound top. Late Roman “groovy” handle. Tan clay, coarse sand temper, greenish-buff slip on exterior surface.

Period 14, Early Islamic/Sasanian

3. Near Girik Bedro #3. Reddish buff clay. White grits prominent. Exterior covered with buff slip.
4. Near Girik Bedro #3. Grey clay, small to medium white angular grits.
5. Near Girik Bedro #3. Reddish buff clay. Small white grits. Diameter unknown.
6. Near Girik Bedro #3. Sassanian. Brownish buff, small white grits. Buff slip on exterior surface.
7. Ali Huseynoğlu Höyük. Light greenish ware, sand tempered, fast wheel striations on interior.
8. Near Başköy #2. Brownish buff, white grits.
9. Near Girik Bedro #3. Brownish buff clay. Sand and crushed limestone used as temper. Buff slip on exterior.
10. Near Başköy #2. Reddish clay, medium angular grey grits.
11. Near Başköy #2. Dense reddish clay, medium-sized white grits used as tempering. Handmade, coarse.
12. Near Başköy #2. Light greenish buff, sand tempered.
13. Near Takyan #4. Light greenish buff, sandy.
14. Near Takyan #4. Dense brownish buff, small to medium white grits.
15. Near Takyan #4. Reddish clay, medium-sized crushed limestone used as tempering. Buff slip exterior.
16. Near Takyan #4. Greenish buff, sand tempered.

Period 13, Late Roman



Period 14, Early Islamic/Sasanian

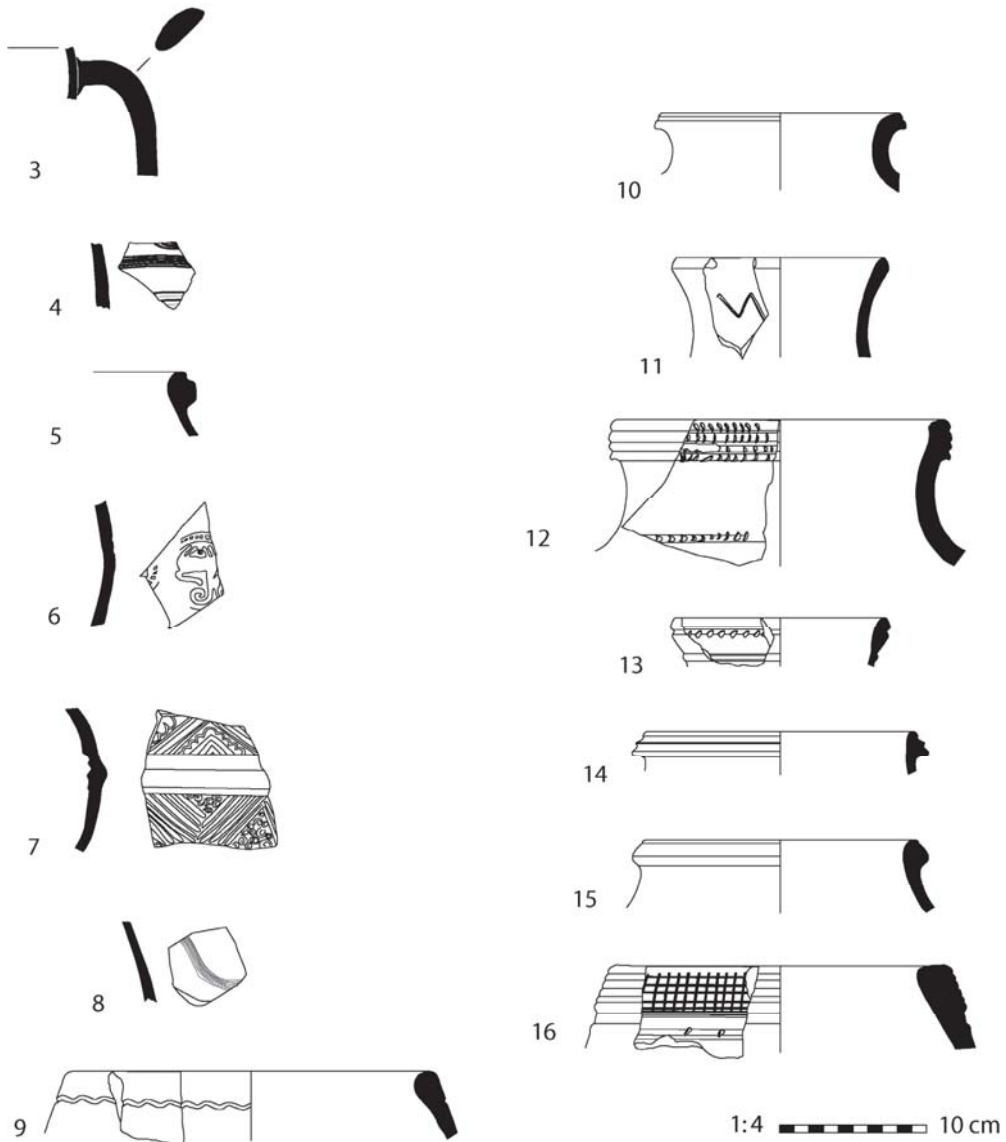


Fig. 28. Period 13, Late Roman ceramics from various Cizre-Silopi sites: 1-2;
Period 14, Sasanian/Early Islamic ceramics from various Cizre-Silopi sites: 3-16.

Sherd descriptions Figure 29*Period 15, Middle Islamic, Selçuk/Artukid*

1. Ayn Şeş Tepe South. Fairly dense greenish buff clay, a few scattered red grits.
2. Ayn Şeş Tepe South. Orange clay. Small white grits. Buff slip surfaces.
3. Ayn Şeş Tepe South. Orange clay, sandy and white small gritty. Greenish buff slip exterior.
4. Ayn Şeş Tepe South. Brownish buff clay. Small white grits.
5. Ayn Şeş Tepe. Brownish buff clay, small white grits, scattered on interior. Surface corrugations from fast wheel.
6. Ayn Şeş Tepe South. Greenish buff ware, small-sized white grits. Parts of exterior and all of interior surfaces covered in bitumen.
7. Hazayi Höyük, lower terrace. Dense reddish clay. Occasional small white grits. Glaze is pale blue, metallic, with design in blue glaze.
8. Ayn Şeş Tepe South. Orange clay, dense, small-sized white grits. Glaze is dark green with lines even dark still.
9. Ayn Şeş Tepe South. Orange clay, dense, small-sized white grits. Glaze is dark green with lines even dark still.
10. Ayn Şeş Tepe South. Yellowish buff clay, small white grits. Glaze is dark green. Overall glaze exterior.
11. Ayn Şeş Tepe South. Reddish clay, small-sized white grits.
12. Ayn Şeş Tepe South. Greenish/grayish buff clay, overfired. Medium-sized black grits quite prominent. Some vegetal tempering as well. Diameter unknown.

Period 15, Middle Islamic, Selçuk/Artukid

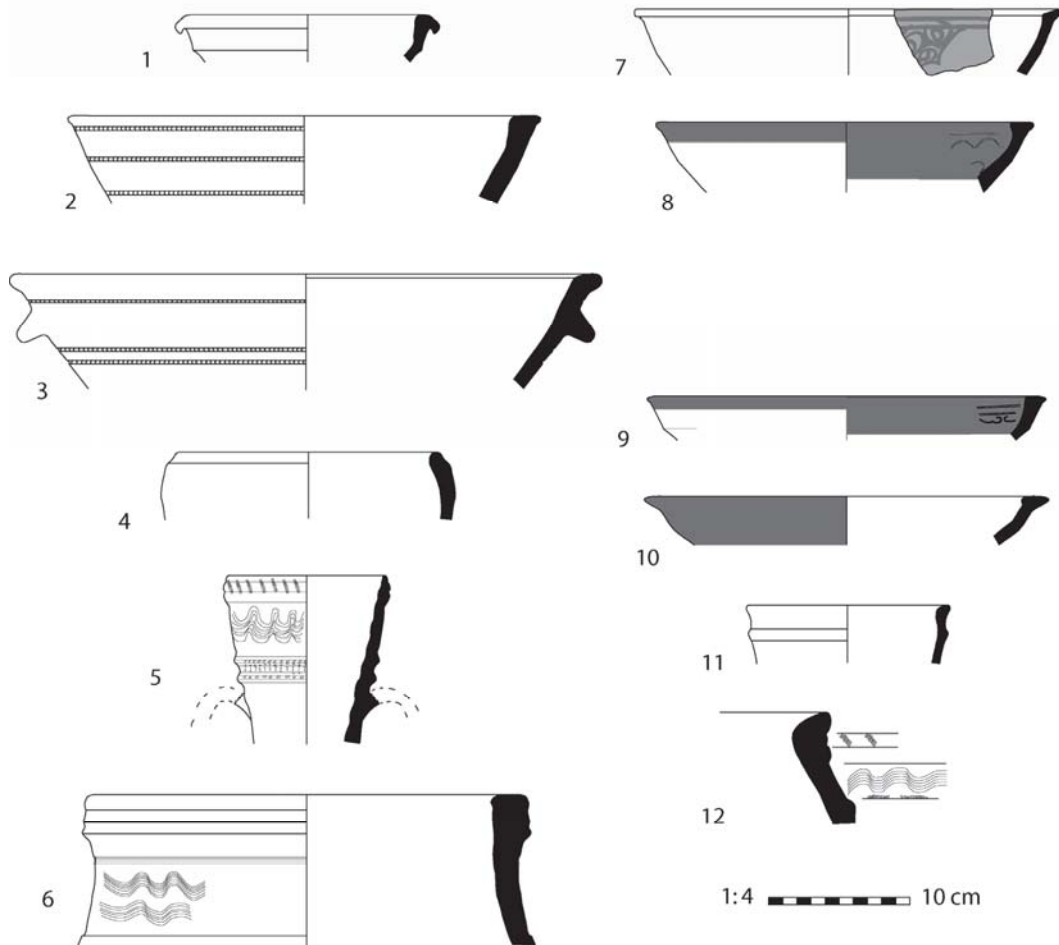


Fig. 29. Period 15, Middle Islamic/Selçuk ceramics from various Cizre-Silopi sites.

ILIPINAR, BARCIN HÖYÜK AND DEMIRCIHÜYÜK Some Remarks on the Late Chalcolithic Period in North-western Anatolia

Jürgen Seeher

Abstract

The evidence for settlements of the Late Chalcolithic period in north-western inland Anatolia is extremely scarce. The excavations at Demircihüyük in the 1970ies yielded for the first time a substantial body of pottery material of this period, but with very limited stratigraphic information. Later on, the Late Chalcolithic cemetery excavated at Ilıpınar produced a large group of vessels similar to the shapes from Demircihüyük, but still difficult to evaluate. Now, after the publication of similar material from nearby Barcın Höyük, further clues have become evident. The purpose of this paper is a re-evaluation of the Demircihüyük material in the light of the new evidence, leading to an attempt at better differentiation of the pottery assemblages at the various sites. At the same time, a summary of the dispersed information available on the Late Chalcolithic settlement remains at Demircihüyük, including radiocarbon datings, is provided.

INTRODUCTION

Due to the scarcity of known sites, the Late Chalcolithic in north-western Anatolia is still an enigmatic period. The recent publication of the Late Chalcolithic remains at Barcın Höyük in the Yenişehir basin in this journal has yielded some fresh evidence (Gerritsen et al. 2010). Here excavations starting in 2005 came across the remains of a short-lived Late Chalcolithic settlement sitting on top of a Neolithic mound. The published material provides a good addition to the findings at Ilıpınar in the neighbouring İznik Basin. At this site, more than forty Late Chalcolithic burials were investigated during the 1987-89 seasons of excavation and yielded a fine corpus of pottery vessels and metal tools and weapons (Thissen 1989/90; Roodenberg 2001; Roodenberg 2008). With reference to the stratigraphy of the settlement mound where this period is not represented, this cemetery was initially assigned to Ilıpınar phase IV, but this denomination was not maintained later on.

The material from these two sites in the Eastern Marmara Region form an almost perfect match for the Chalcolithic finds from Demircihüyük, situated on the north-western rim of the Anatolian highland in the plain of Eskişehir. In his account on the pottery from the Ilıpınar necropolis Laurens Thissen already pointed out similarities with the material from Demircihüyük (Thissen 1989-90: 106-107), and in his recent study on the Barcın pottery he states that this material is “fully comparable” to the Demircihüyük Late Chalcolithic finds (Gerritsen et al. 2010, 206). But a closer look at the material from the three sites also reveals significant differences, which seem to indicate a chronological sequence.¹

¹ I am grateful to Ulf-Dietrich Schoop and Jacob Roodenberg for various comments on earlier versions of this paper.

THE DEMIRCIHÜYÜK EVIDENCE

The small settlement mound of Demircihüyük, excavated in 1975-78, dates essentially to the Early Bronze Age I-II period. However, from these layers also came thousands of Neolithic and Chalcolithic sherds displaying a wide variety of wares, shapes and decorations. We have been able to show that deposit of older settlement layers had been used in the EBA to some extent for the production of mud bricks, and the same material had been employed also for fill in various parts. With this old deposit also old pottery sherds and other finds found their way into the EBA levels (Korfmann 1983: 25; Seeher 1987: 11-17). For the material dating to the Neolithic and Early Chalcolithic period no additional stratigraphic information is available, i.e. the actual source of these objects remains unknown. It seems clear, however, that it has to be sought in the immediate vicinity of the mound, buried today under the sediment of the surrounding plain.

For the Late Chalcolithic period the case is different. Actual layers of this period – settlement phase C, and probably also B – were probed in deep trenches in squares I 10 and K 9/10 on the eastern side of the mound (Korfmann 1983: 25-27; Seeher 1987: 15-16). The observation of archaeological features was restricted to excavation square K 10; here a mud brick wall without foundation stones was encountered (Korfmann 1983, 27), and from the profile section well below the base of the EBA fortification fragments of both humeri and femora of an adult (probably male) were retrieved (Schröter 1987: 70). During the excavation we realized that this was apparently a burial, but further work in this part had to be abandoned due to safety reasons. No finds were associated with these skeletal remains.

The excavation in these deep soundings was carried out under difficult circumstances up to 2.5 m below ground water level. In the absence of a proper drainage system, pump pits were dug to remove water, but the trenches were flooded every night and had to be pumped out the next day. As a result, the trenches never dried and the earth remained soaking wet and very sticky. In order to separate finds, units of dug earth were laid out in a field and allowed to dry. Only then was it thoroughly searched. We were well aware of the inadequacy of this method, especially of the contamination of the trenches with earth and objects washed in from higher levels. But given the means available at the site at that time, the alternative would have been to abstain altogether from this opportunity to learn more about the deepest levels of the mound.

The definition of the Late Chalcolithic pottery assemblage assigned to settlement phase C relies in part on material from these soundings, especially in trench K 9/10, where the vast majority – about 80% of 302 sherds – belonged to ware groups F and G (Seeher 1987: 16 Fig. 2). Sherds coming from the same vessels, quite a few actually fitting together, show – like the mud brick wall mentioned above – that we are dealing with material from actual settlement layers of this period, and not from some kind of fill under the earliest EBA levels. Apparently the EBA settlers chose an old mound as a building site for their fortified village, perhaps seeking additional height to increase security. Concerning the extension of these old settlement layers, a high frequency of Late Chalcolithic sherds in the earliest EBA layers in excavation squares F/G 8 to the south of the EBA mound (Seeher 1987: 66 Fig. 15) is of significance. If one day a new search for

pre-EBA levels at Demircihüyük should be initiated, it is this area which seems most promising – here the overlying EBA layers are mostly eroded and the ground water table is much lower than directly under the mound and on its northern side (Korfmann 1983: 25 note 44).

Taking this pottery assemblage from the deep soundings as a starting point, we were able to define pottery fabrics and shapes of this period and detect Late Chalcolithic stray sherds in all EBA levels of the mound. In this way, 1393 diagnostic sherds have been identified (Seeher 1987: Fig. 8).

POTTERY FROM ILIPINAR, BARCIN HÖYÜK AND DEMIRCIHÜYÜK: A COMPARISON

From the technical point of view, a general similarity of the three complexes is obvious with the existence of both a fine and a coarse ware. Differences like the presence or absence of organic temper are probably best explained as a response to the properties of the locally available clays and/or local traditions in vessel production. At the Ilıpınar cemetery the fine ware is described as grit-tempered only with well-burnished surfaces in tones from dark-brown to anthracite and the coarse ware with rough surfaces in greyish-buff (Thissen 1989-90: 106; Roodenberg 2008: 319); at Barcın Höyük a plain burnished ware (PBW) of black, occasionally brown colours is shown to consist of two fabrics – either a mineral-tempered sandy fabric or a mineral-tempered fabric with some amount of fibres added; coarse ware is pale brown, greyish or pale orange with mineral and coarse fibre temper (Gerritsen et al. 2010: 204). At Demircihüyük, fine ware F is burnished and displays mostly black to dark brown and dark grey colours with the bowls, whereas jugs are often light grey to light greyish brown. Fine organic temper, possibly the remains of animal dung, is common. Grit temper was observed only with carinated bowls with everted rims, in addition to a more coarse organic temper. The coarse ware G displays rough surfaces, reddish brown to light greyish brown, and rather coarse temper consisting of grit and fibre (Seeher 1987: 21-22).

Concerning the shape repertoire of these sites, Ilıpınar and Barcın Höyük are related, but differences are obvious, as well. Thissen is certainly right in pointing out that the sample from the cemetery is biased – usually not every vessel type known in living culture finds its way into a grave. Due to the lack of obvious traces of use on some vessels he even reckoned with the possibility “that some of the burial inventory was specifically made for the occasion”, but other vessels were certainly in use prior to the deposition with a burial (Thissen 1989-90: 93).

Perhaps the most important difference between the two Eastern Marmara sites is the absence of carinated bowls with everted rim at Ilıpınar (Thissen 1989-90: 92), whereas this shape is the hallmark of the Barcın inventory (Fig. 1:1-2). Instead, at Ilıpınar bowls invariably belong to the inverted-rim type (Fig. 1:8-9) – a shape much less common at Barcın Höyük (Fig. 1:3).

Another striking difference is the absence of tulip-shaped beakers at Barcın Höyük. These vessels were nearly always present in the burials at Ilıpınar (Thissen 1989-90: 92), and traces of use at least on some of them show that they were not simply made for

funerals (Fig. 1:10-11). The same is also true of the jugs and jars with vertical handles, which form a prominent part in the Ilıpınar inventory (Fig. 2:4-6). At Barcın similar vessels existed (Fig. 2:1-2), although only a few pieces have been encountered during excavation (Gerritsen et al. 2010: 205).

How do these complexes compare with the Late Chalcolithic pottery from Demircihüyük? The inverted-rim bowls from Ilıpınar are identical with the common bowls of ware F (Fig. 1:6-7). Parallels for the jugs and jars with one or two handles exist as well (Seeher 1987: Pl. 26:1-14), although here the fragmentary state of the Demircihüyük material is problematic – among the 222 sherds of jugs and jars identified were quite a lot without handle, but in addition 121 fragments of handles in fine ware F alone were found. This shows that vertical handles were a common element (Seeher 1987: 40-41). Vessel varieties comprise specimens with vertical neck with more or less everted rim (Fig. 2:8-10), with a more S-shaped profile from shoulder to rim (Fig. 2:9) and apparently also with a conical neck (Fig. 2:11).

Several sherds with incised decoration stem from tulip-shaped beakers. With the Ilıpınar examples at hand, some new reconstructions for the sherds from Demircihüyük become possible. The decoration pattern is less varied, since bands filled with dots are absent – here only bands of zig-zag hatching occur and compare to an example from Ilıpınar with zig-zag bands (Fig. 1:12 and 1:10). The application of incised decoration also on the inside of the vessel close to the rim, which occurs several times at Ilıpınar, is also attested with one sherd at Demircihüyük (Seeher 1987: Pl. 26:19). Another fragment belongs to a piece with a vertical handle close to the rim (Seeher 1987: Pl. 26:17). A complete handle of this type (Fig. 1:13) was originally not classified with the Late Chalcolithic ware F due to its content of grit temper, but the resemblance is obvious and the additional occurrence of organic temper with this piece speaks in favour of a connection. Another parallel is a coarse ware handle at the rim of a jar (Fig. 2:12), which finds a counterpart in a complete vessel from Ilıpınar (Fig. 2:7). The only vessel type from Ilıpınar not found at Demircihüyük is the squat hole-mouth bowl or pot which is always fitted with a vertically placed handle at the rim (e.g., Roodenberg 2001: Fig. 2:7-8). As a matter of fact, this shape is also absent at Barcın Höyük, which may indicate that these vessels are a local development at Ilıpınar.

Turning to the Barcın material, we see that parallels for the typical bowls with everted rim do exist at Demircihüyük (Fig. 1:4-5), although here they are much less common than the inverted-rim bowls (55 vs. 621 pieces). It is interesting to note that the sherds of this shape were found to contain not only the fine organic temper typical for ware F, but often also chaff like plant fibres and grit temper (Seeher 1987: 22 Pl. 25:9-20), thus resembling the pieces from Barcın Höyük. Deep bowls (Gerritsen et al. 2010: Fig. 9:1; cf. Seeher 1987: Pl. 26:24), jars with vertical handle (Fig. 2:1-2), and coarse ware pots with lug handles near the rim (Fig. 2:3 and 13) exist at both sites, too.

FURTHER COMPARISONS

The parallels cited above indicate a close relationship between these three sites. At the same time we see that significant forms are missing either at Ilıpınar or at Barcın Höyük, whereas almost all shapes known from these two sites exist at Demircihüyük. This seems to indicate a chronological difference between the two Eastern Marmara sites. The material from Demircihüyük does not constitute proof, but the stratigraphy at Beycesultan yields the necessary clues.

Most obvious is the occurrence of carinated bowls with everted rims in Beycesultan LC 3 and LC 4. This vessel form is described as “a new shape characteristic for the L. Ch. 3 period” (Shape 19: Lloyd and Mellaart 1962: 93 and Fig. P.8:1.6.7.11; P.9:16-20); “this is by far the most numerous and most typical shape of L.Ch. 4” (Lloyd and Mellaart 1962: 95 and Fig. P.10:1-8.15-20; Fig. P.11:6-7.11.13.15.16; Fig. P.12:22-24.36-41). Another obvious example is a jug-handle with a knob on top from Barcın (Gerritsen et al. 2010: Fig.9:3) which finds good parallels at Beycesultan LC 3 (Lloyd and Mellaart 1962: Fig. P.8:18; P.9:23). Other comparisons between Beycesultan LC and Barcın Höyük are more on a general level due to the simple shape repertoire at the latter site. Thissen points out that both display a similar assemblage structure consisting of large bowls or dishes, jugs and jars and coarse ware hole-mouth pots (Gerritsen et al. 2010: 206).

The same is true of the material from the burials at Ilıpınar, but here carinated bowls with inverted rims take the place of the carinated bowls with everted rims. At Beycesultan, this shape postdates the carinated bowl with everted rim to a large extent: Vessels with inverted or incurving rims are described at Beycesultan as a new and rare shape in L. Ch.3 and 4, “possibly ... the prototypes for the E.B 1 bowls” (shape 20: Lloyd and Mellaart 1962: 93 and Fig. P.8:4; Fig. P.9:7; Fig. P.12:13.16.44). Indeed, the latter (Lloyd and Mellaart 1962: Fig. P.14:20-25; Fig. P.15:12-17) form a much better parallel for the carinated bowls with pronouncedly inverted rims from Ilıpınar or Demircihüyük. At Beycesultan they seem to stand at the end of a development which is not present in the stratigraphy of the excavated trench due to a hiatus between the Late Chalcolithic and the Early Bronze Age layers (Seeher 1987: 59; Schoop 2005: 149-150). This assumption is also corroborated by the fact that there is only one single occurrence of a carinated bowl with everted rim in an EB 1 context, which is described as “possibly L. Ch. 4 survival” (Lloyd and Mellaart 1962: 123 Fig. P.21:3).

The other typical shape at Ilıpınar, the tulip-shaped beaker with flat or rounded base and one or two vertical handles, has parallels at Beycesultan LC 3 and 4 in the shape of deep bowls with everted rim and narrow base and shallow cups with flaring sides (Lloyd and Mellaart 1962: Fig. P.10:9.21). The latter vessel form is also known from Kuruçay 6 (Duru 1996: Lev.66:9).

Due to the fragmentary state of the material, the shapes of jugs and jars from Demircihüyük LC ware F are less well known than the complete vessel specimens from the cemetery at Ilıpınar. The latter often display a fairly well offset neck and a globular or even squat globular body (Fig. 2:4.6), whereas the shapes at Demircihüyük often seem to have smaller bodies and less pronounced shoulders (Fig.2:8-10). At Beycesultan, parallels

come from the LC 3 and 4 levels (e.g., Lloyd and Mellaart 1962: Fig. P.9:1.24; P.10:12; P.11:8). At Kuruçay one-handed jugs and two-handed jars are abundant, but proportions differ in favour of wider necks and smaller bodies (best comparable are Duru 1996: Lev.54:1-2; 63:1; 64:8).

To some extent, the classification of the pottery shapes from the three north-western sites is hampered by the absence of detailed information on the development of pottery shapes at the transition from the Late Chalcolithic to the Early Bronze Age. With the help of material from survey sites near Eskişehir and from the salvage excavation at Kaklık Mevkii near Afyon, Turan Efe has tried to determine a horizon which predates the EBA levels at Beycesultan and Demircihüyük (Efe 1994; Efe et al.1995; Efe and Ay Efe 2007). However, most of the shapes are known from both periods or have parallels in EBA contexts only, which seems to speak in favour of a relatively late date of this material (Schoop 2005: 301). Without a stratigraphy it seems impossible at the moment to determine where in the LC-EBA sequence Kaklık Mevkii has to be placed.

DISCUSSION

Some 35 years ago, at the time when the Late Chalcolithic pottery complex from Demircihüyük was excavated, there was almost no comparative material known from north-western Anatolia. In the light of the investigations at Ilıpınar and Barcın Höyük, at least the picture of the pottery repertoire of this period has become somewhat clearer. However, differences are obvious and find their explanation in various factors: First of all, distances between the sites and their position in different environments have to be kept in mind. Ilıpınar and Barcın Höyük, 30 km away, lie in the hinterland of the Sea of Marmara. Demircihüyük, on the western end of the Anatolian highland, is 100 km as the crow flies to the south-east of Ilıpınar, and Beycesultan lies in inland western Anatolia, some 200 km as the crow flies to the south of the Eastern Marmara region and about 150 km south-west of Demircihüyük. Secondly, the character of the sites and the extent to which they have been investigated is very different, resulting in a different material basis: at Ilıpınar more than 40 burials of a cemetery were investigated, at Barcın Höyük several small soundings were dug into a settlement layer deposit about 0.50-0.65 m thick, and at Beycesultan a wide and very deep trench was sunk into the Chalcolithic levels, yielding about 6 m stratigraphy for the LC 3 and 4 layers alone. At Demircihüyük, finally, Chalcolithic in situ material came only from two small soundings, but the majority consists of stray finds from the EBA levels of the mound.

The third reason for the differences in the pottery repertoire seems to be chronological. In my opinion, Barcın Höyük is probably partially older than Ilıpınar LC, and Demircihüyük LC seems to be at least partially contemporary with both of them. However, the radiocarbon datings (Fig. 3) support this assumption only to some extent. The sample from Barcın Höyük (charcoal?) comes from settlement layers (Roodenberg, J., van As, A. and S. Alpaslan Roodenberg 2008: 55, 62), whereas the two Ilıpınar dates were obtained from bone samples from two different burials (Roodenberg 2008: 320). The two samples from Demircihüyük were assigned to the Late Chalcolithic phase C

(Quitta 1987: 13): Kn2780 comes from the bones of the supposed burial in excavation square K10 mentioned above. Kn2670, on the other hand, was obtained from a sample of bones from the deepest layers reached in excavation square K9.

This small number of radiocarbon datings certainly does not constitute a reliable basis. Barcın Höyük LC could actually begin earlier than Ilıpınar LC, but the Demircihüyük samples seem very late indeed. Even if we omit sample Kn 2670 due to its limited stratigraphical reliability and its unusually long standard deviation of 130 years, we are left with a date within the second half of the fourth millennium BC for the sample from the burial. But perhaps it is this origin of the sample which is actually the reason for the late date: the adult burial at Demircihüyük might represent a period when this part of the old mound was not used as a settlement ground any more. In other words, the burial could belong to the hiatus between the Late Chalcolithic phase C and the earliest EBA phase D, which is supposed to set in somewhere around 2900 BC.

Radiocarbon dates from other Late Chalcolithic sites comprise Beycesultan LC 3 and Kuruçay 6A, which lie around the middle of the fourth millennium BC (Schoop 2005: Fig. 4.8). A date for Beycesultan LC 1, on the other hand, falls within the first half of this millennium, thus comparable to the date from Barcın Höyük and sample GRN 16151 from Ilıpınar shown in Fig. 3. From the point of view of pottery typology, this equation does not seem right, and here further evidence is urgently needed, preferably an excavation at a site in north-western inland Anatolia yielding a complete stratigraphy for the transition from the Late Chalcolithic to the Early Bronze Age. Further clarification may eventually come from new radiocarbon datings, which will be more reliable than the Beycesultan and Demircihüyük dates obtained many decades ago.

At the moment we have to state that the Ilıpınar-Barcın Höyük-Demircihüyük horizon is lacking a clear connection with earlier sites: We know quite a few sites with settlement layers belonging to the fifth/early fourth millennium BC, e.g. Beşik-Sivritepe, Gülpınar and Kumtepe A in the West, Toptepe 1 and Hoca Çeşme 1a in Thrace, Beycesultan LC 1-2, Aphrodisias Pekmez LC 1 in the south and Orman Fidanlığı VI-VII, Kes Kaya and Yazır Höyük in the east. But none has yielded more than hints on the origins of the pottery inventory of these three north-western sites. The current absence of significant stratigraphies not only here, but also in other parts of Anatolia has prompted Ulf-Dietrich Schoop to state that “The second half of the Chalcolithic is one of the least well-understood periods in Anatolian archaeology” (Schoop 2011: 29). Further research will have to show to what extent climatic changes, social developments, migration and/or other factors can be held responsible for this situation.

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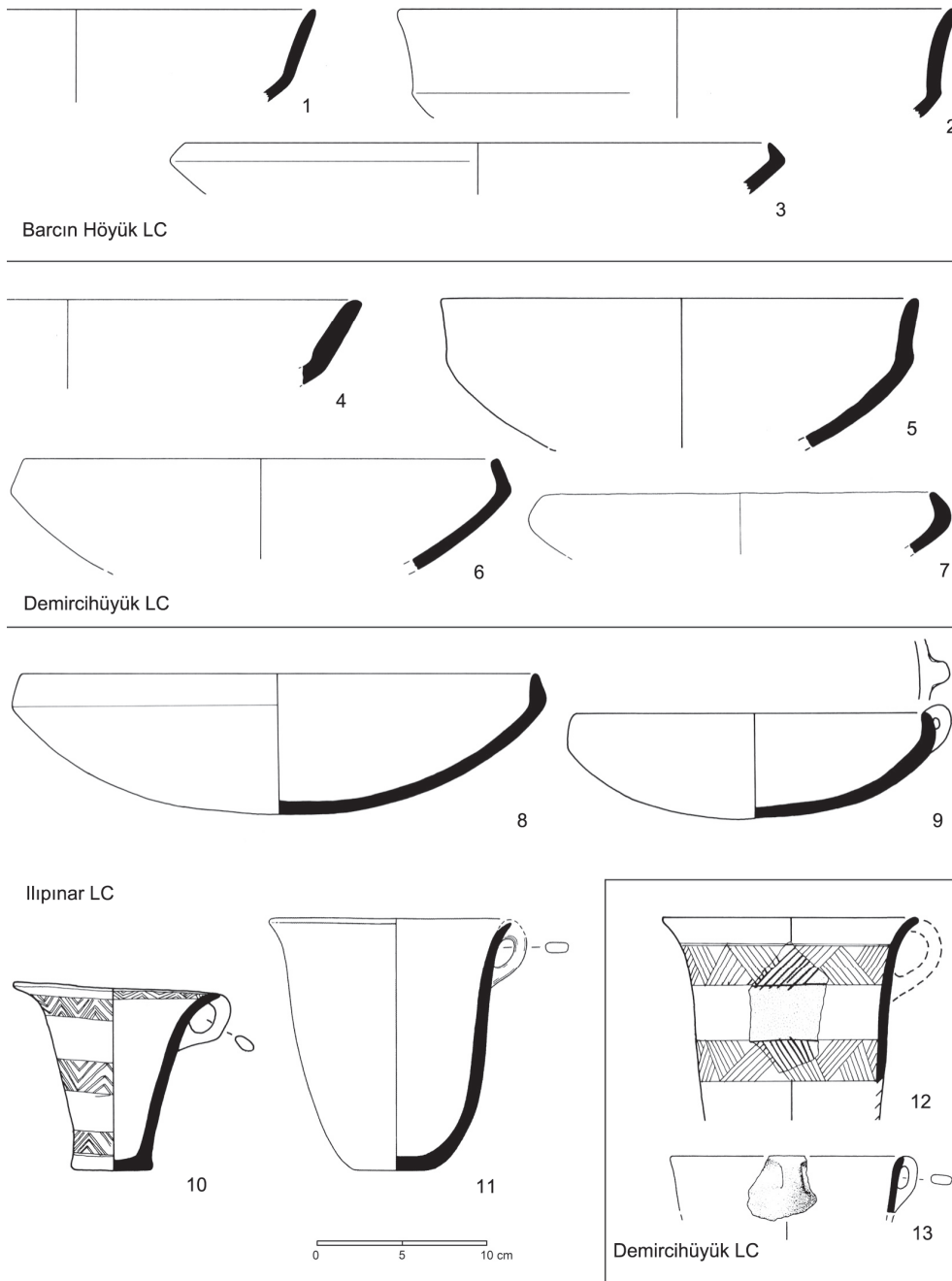


Fig. 1. Bowls and beakers from Barcın Höyük, Ilıpınar and Demircihüyük.

1 Gerritsen et al. 2010, Fig 7:4; **2** l.c. Fig. 7:7; **3** l.c. Fig. 7:3; **4** Seeher 1987, Pl. 25:18; **5** l.c. Pl. 25:16; **6** l.c. Pl. 24:6; **7** l.c. Pl. 24:21; **8** Roodenberg 2001, Fig. 2:3; **9** Thissen 1989-90, Fig. 16:11; **10** l.c. Fig. 17:2; **11** Roodenberg 2008, Fig. 10:2; **12** Seeher 1987, Pl. 26:16, new reconstruction; **13** l.c. Pl. 23:21.

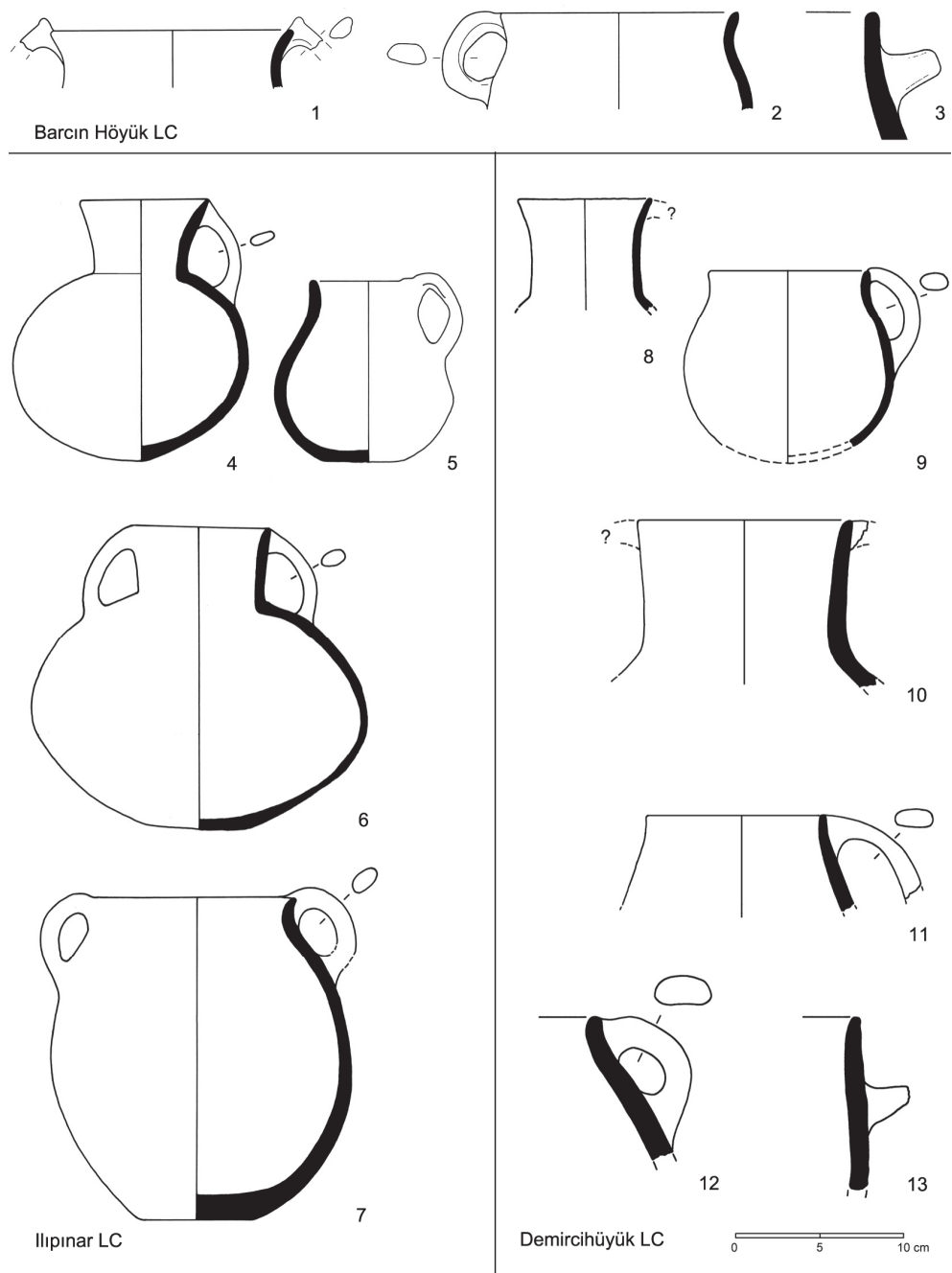


Fig. 2. Jugs and jars from Barcın Höyük, Ilıpınar and Demircihüyük.

1 Gerritsen et al. 2010, Fig. 9:3; 2 l.c. Fig. 10:4; 3 l.c. Fig. 11:2; 4 Thissen 1989-90, Fig. 17:3; 5 Roodenberg 2008, Fig. 2:5; 6 Thissen 1989-90, Fig. 18:1; 7 l.c. Fig. 18:2; 8 Seeher 1987, Pl. 26:13; 9 l.c. Pl. 26:4; 10 l.c. Pl. 26:6; 11 l.c. Pl. 26:2; 12 l.c. Pl. 27:10; 13 l.c. Pl. 27:7.

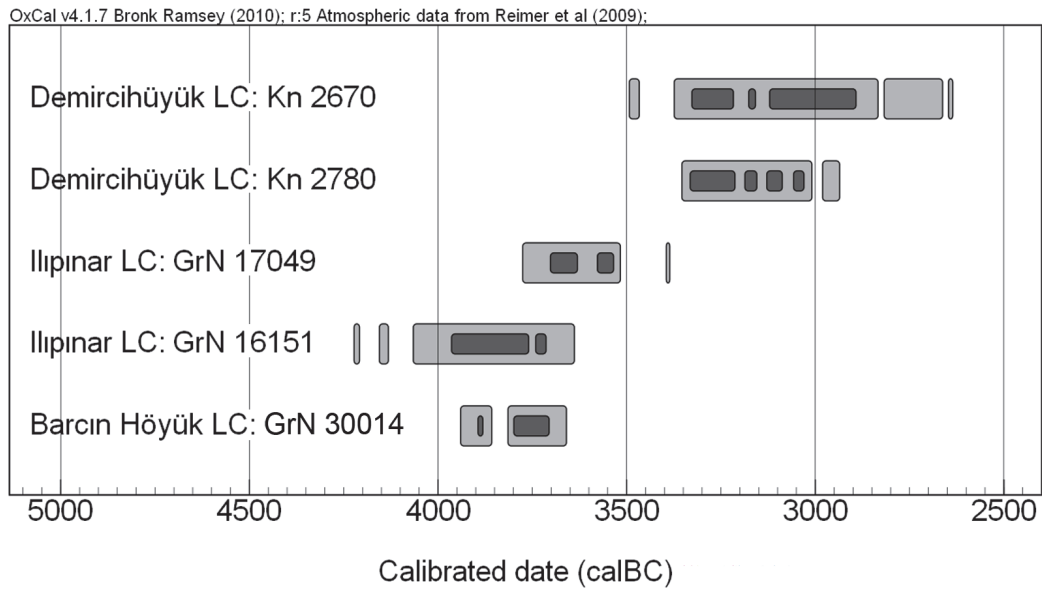


Fig. 3. Radiocarbon datings from from Barcın Höyük, Ilıpınar and Demircihüyük.

The plot shows the one and two sigma ranges (68.2 and 95.4% reliability) in different shades of grey (Kn 2670: 4380±130 BP; Kn 2780: 4470±55 BP; GrN 17049: 4850±60 BP; GrN 16151: 5060±110 BP; GrN 30014: 4990±40 BP).

Illustration by Seeher, using OxCal v4.1.7.

JAZIRAH BURNISHED WARE FROM TELL ARBID AND ITS NORTHERN AFFILIATIONS

Anna Smogorzewska

Abstract

In the article a group of ceramic vessels, called the Jazirah Burnished Ware, from Tell Arbid (NE Syria) is discussed, based on archaeological examination and laboratory studies. They differ from local pottery of north-Mesopotamian tradition both in shape and technological aspects. Pottery of this type occasionally appears at sites in the Upper Khabur region alongside Ninevite 5 pottery with late excised decoration (EJ II). The Jazirah Burnished Ware from Tell Arbid takes the form of bowls (grey burnished carinated bowls, orange hemispherical bowls with ridged profile and rounded bowls with beaded rims), pot stands (some arrow-fenestrated and white-inlaid) and jars. Apart from their burnished surfaces, the vessels' distinguishing features are their fabric, clay sources and firing conditions. Some characteristics of the Jazirah Burnished Ware, such as their shiny surface and specific color, could have made them transmitters of cultural information on their users and/or manufacturers. In search of the origins and affiliations of the Jazirah Burnished Ware, its relations with Anatolian and Transcaucasian pottery traditions are pointed out, based on the common traits of burnishing and white inlays. The presence of Jazirah Burnished Ware at sites in the Upper Khabur region can be regarded as a product of interregional relations between the Jazirah and the Upper Euphrates and Tigris founded on exchange of Eastern Anatolian resources (obsidian and metal) and on seasonal nomadic wanderings.

INTRODUCTION

Among late Ninevite 5 period pottery from Tell Arbid, a site in north-eastern Syria, there is a group of vessels, called the Jazirah Burnished Ware, that differs both in form and in technological respect from north-Mesopotamian pottery tradition.¹ The Jazirah Burnished Ware appears along Ninevite 5 pottery with late excised decoration and the earliest examples of Metallic Ware (EJ II period in the Syrian Jazirah periodization).² A characteristic trait, which is shared by different forms of these vessels, is the careful burnishing of both the outer and inner surfaces of the vessels' walls.³ Burnishing is a special type of surface treatment applied to leather-hard clay (Rice 1987: 138). A smooth and hard tool, such as a pebble, a bone or a horn, is used in the process. It results in a compaction of clay particles, which yields a lustrous surface that bears facets of the burnishing process. Burnishing is not a typical feature for Ninevite 5 pottery, neither was

¹ Excavations at Tell Arbid have been conducted since 1996 by a Syrian-Polish Mission, led by P. Bieliński.

² A few examples of Jazirah Burnished Ware have been found at Tell Arbid also in EJ IIIa contexts.

³ The name "Burnished Ware" has been used for different categories of ancient Near Eastern pottery distinguished by this characteristic surface treatment, e.g. Neolithic Dark-Faced Burnished Ware, Burnished Ware in EBI Palestine, Red-Black Burnished Ware in Early Transcaucasian culture or Burnished Grey Ware in Iran.

it a popular surface treatment in other ceramic traditions of northern Mesopotamia, where vessels usually have wet-smoothed and dull surfaces.⁴

Late Ninevite 5 Jazirah Burnished Ware has been encountered on just a few sites in the Upper Khabur region, among others at Tell Barri and Tell Leilan (Valentini 2008a; Valentini 2008b; Valentini 2008c; Calderone and Weiss 2003).⁵ First studies on the burnished ware from Upper Khabur region were based on Tell Barri findings by S. Valentini who also proposed the name of Jazirah Burnished Ware for this category of vessels (Valentini 2008b: 26). The Jazirah Burnished Ware from Tell Barri was discovered in a “Sacred Complex” (Area G). Because of this context and the vessels’ esthetic value, Valentini stresses their symbolic function. He interprets them as vessels used during religious ceremonies and as an expression of their users’ cultural or religious identity. Tell Arbid, where extensive Ninevite 5 period settlement was attested, yielded an assemblage of Jazirah Burnished Ware which is diversified both in its typological and technological aspects. Most of the vessels come from Area D in the north-western part of the site, from a late Ninevite 5 residential (rather than sacred, as in Barri) quarter.

The presence of Jazirah Burnished Ware at Tell Arbid poses some questions regarding its provenance and affiliations, as well as the interregional connections of Tell Arbid in the late Ninevite 5 period. A separate pottery tradition, related to the Jazirah Burnished Ware, may have been the result of cross-cultural connections or resulted from the presence at Tell Arbid of a group of people who used the local clay to manufacture vessels according to their own tradition and technique. Another problem is the function and meaning of the Jazirah Burnished Ware vessels within the Tell Arbid community. Vessels, apart from their utilitarian function, can also have a symbolic meaning (Douglas and Isherwood 1979; Hodder 1982; Hodder 1986; Strange 1989). They belong to the repertoire of a “material culture language”, as means of communicating between individuals and groups. A particular ornament or shape, a color or method of production may have been identification signs conveying their users’ social, religious or cultural affiliations. The Jazirah Burnished Ware, which stands out among the rest of the Ninevite 5 period pottery because of its shiny surface, color and forms, may have served as transmitters of information on the identity of their manufacturers and users.

⁴ Burnishing was used for utilitarian pottery, foremost for cooking pots. This kind of surface treatment sealed the pots’ walls, reducing their permeability and thus improving their usefulness. Also among late Ninevite 5 cooking pots, there are some examples with a burnished surface.

⁵ Apart from the Jazirah Burnished Ware – being a distinctive group of vessels with a set of common features, found in late Ninevite 5 layers from i.a. Tell Arbid, Tell Barri and Tell Leilan – sites in the Syrian Jazirah (i.a. Tell Brak, Tell Mozan, Tell Chuera and Tell Hammam et-Turkman) have yielded vessels of different forms that have a burnished surface; these vessels are usually referred to as “Transcaucasian Ware” (Oates et al. 2001: 160-161, Figs. 191, 400; Buccellati and Kelly-Buccellati 1988: Fig. 23: M1 40, M1 41; Kühne 1976: Fig. 39: 1-4; Curvers 1991: Fig. 3: 6176; Orthmann et al. 1995: Abb. 31: 125).

JAZIRAH BURNISHED WARE – FORMS AND TECHNOLOGY

This paper is based on a study of 45 diagnostic fragments of Jazirah Burnished Ware vessels. They come from Tell Arbid's Area D, where a late Ninevite 5 period residential quarter has been exposed at an area of over 500 m sq.⁶ The Jazirah Burnished Ware comprises different vessel forms, from bowls (being the most frequent form), through pot stands to jars.

1. Burnished bowls

In total, 33 burnished bowls have been found so far (Fig. 1). Among the bowls there are three main types: grey burnished carinated bowls (16 examples), orange burnished hemispherical bowls with ridged profile (13 examples) and burnished round-sided bowls with beaded rims (4 examples). Within each of these types, technological differences have been observed, for the most part related to the vessels' firing. Variations resulting from using different clay sources have also been attested.

1A. Grey burnished carinated bowls

The distinguishing features of grey burnished carinated bowls, other than the characteristic shape of their wall profile, are their everted rims and flat bases (Fig. 2). This type has parallels at Tell Barri and Tell Leilan IIIc (Calderone and Weiss 2003: 199, Fig. 8: 5; Valentini 2008a: Fig. 6: 7; Valentini 2008b: Fig. 7; Valentini 2008c: Fig. 3: 1-3). The vessels' rims measure 18-21 cm and they reach 8-9 cm in height. Their most visible attribute are the grey burnished surfaces. As far as production technology is concerned (above all the firing conditions), three major groups can be distinguished within this category. Three different clay sources were used for their production (an MGR analysis of 3 samples, each representing a different group of the grey burnished carinated bowls, proved that they had been made of three different varieties of raw material).⁷

The first group has dark grey wall surfaces and thin, dark grey layers visible in the section just beneath the surfaces, while its core is brownish. The fabric contains fine mineral particles, with no visible coarser inclusions, and some fine straw. The laboratory analyses showed that the dark grey surface did not result from applying a special layer to the vessel, but had appeared as the result of reduction towards the end of the firing. It may be the effect of smudging (during firing in an open fire, the flames are stifled by covering the fire with a thick layer of e.g. manure or sawdust; this cuts off oxygen supply and carbon deposits at the surface and in the pores). Smudging had the dual purpose of darkening the surface and sealing the pores in the walls with carbon particles. The bowls were fired at low temperatures. A MGR analysis of one of such bowls indicated a temperature of 700-800 °C.

⁶ With the exception of a few burnished ware pot stands found in Areas W and A.

⁷ The MGR (Matrix Grouping by Refiring) analysis allows for a preliminary raw material classification and identifying the approximate original firing temperature. The analyses were performed by M. Daszkiewicz (ARCHEA).

The second group of the grey burnished carinated bowls has uniform, light grey surfaces and sections – the result of firing in a reducing atmosphere. The MGR analysis of one sample indicated a firing temperature of 800-900 °C. The fabric contains a large amount of fine calcareous particles, which were not added as a temper but had been embedded in the clay used for the ceramic paste.

The vessels from the third group have grey surfaces and sections. They were made of a fine-grained, homogeneous clay with no visible coarser inclusions. Their fabric is soft and they were also fired at low temperatures (600-700 °C), again as demonstrated by the MGR analysis of one example of this group.

1B. Orange burnished, hemispherical bowls with ridged profile

Burnished, orange surfaces of walls and a ridged outer profile are the hallmarks of this group, which has so far found analogies only at Tell Barri (Valentini 2008a: Fig. 6: 1-6; Valentini 2008b: Fig. 5; Valentini 2008c: Fig. 3: 4-7). The bowls have simple rims, closed or vertical, and rounded bases, with rim diameters of 11-15 cm and heights from 7 to 9 cm (Fig. 3). The clay used for the ceramic paste was tempered with some straw. The MGR analysis showed that the bowls were fired at low temperatures (700-800 °C). Most orange burnished bowls have a dark grey core visible in the cross sections, which also attests to a low temperature or short period of firing. However, a few examples bear witness to a different technological process. They have a uniformly orange section with fine calcareous particles and mica. Within this group, there is a fragment of bowl with a tiny crescent lug just beneath the rim (Fig. 3: 8). Similar lugs are distinctive for Ninevite 5 period cooking pots. Two fragments of bowls in the typical orange burnished bowl shape are also known in a grey variant – they have burnished surfaces, but they are uniformly grey, as are their sections (Fig. 3: 9). Unlike the orange bowls, they must have been fired in a reducing atmosphere. The fabric of these grey specimens is homogeneous with no visible coarser inclusions.

1C. Burnished, round-sided bowls with beaded rims

The bowls have beaded rims and rounded bases (Fig. 4). Their rim diameters range from 14 to 18 cm and they are 8 to 10 cm high. Three of the bowls are grey (surfaces and sections), which points to their having been fired at a reducing atmosphere (Fig. 4: 1, 3, 4, Fig. 5). Their fabric contains fine mineral particles. Among these bowls, there is one with circular clay “flakes” applied just beneath the rim and forming an ornamental band (Fig. 4: 1, Fig. 6). The fourth bowl is brownish, with irregular, dark grey patches on the outer surface (Fig. 4: 2, Fig. 7). Such a mottled surface can point to firing in an open fire with uncontrolled conditions. The bowl’s section reveals a grey core with some chaff.

2. Burnished pot stands

Area D has yielded six specimens of burnished pot stands (further two examples come from Areas A and W). They differ among themselves in form, technological details and decoration (Fig. 8). Two different clay sources were used in their production.

2A. Dark grey burnished, arrow-fenestrated pot stands

Pot stands of this type have cut-out “windows” shaped as arrowheads. The vessels’ surfaces are dark grey, and their sections – brown. This effect may have been achieved by smudging, just as in the case of dark grey burnished carinated bowls. The fabric contains some fine mineral particles and some fine straw.

One of the best preserved examples was decorated with arrow-shaped fenestrations placed one over another in vertical bands (Fig. 8: 1). A vertical herringbone pattern, consisting of regularly spaced, slanting incised lines divided by two or three vertical lines, was placed between the fenestrated bands. The incisions were filled with a white paste. White-inlaid incisions also decorated the pot stand’s rim. MGR analyses showed that the pot stand had been fired at a temperature of 700-800 °C. A fragment of another arrow-fenestrated pot stand has a shiny, black surface. At the base of the triangular fenestration, two more small triangles have been excised (Fig. 8: 2).

2B. Grey burnished pot stands with grooved decoration

Three examples of this category of pot stands have been attested. Two have dark grey surfaces and brown sections (Fig. 8: 4), while the third one is grey (Fig. 8: 3). The difference is the effect of firing conditions. Pot stands were fired at 700-800 °C. All the pot stands have similar decoration: horizontal multiple zig-zags surrounding the vessels in two bands, one in the upper and one in the lower part of its walls. The resultant middle band is divided into segments by vertical grooved lines. Each segment is filled with a kind of a vertical herringbone pattern.

2C. Grey burnished pot stands with white-inlaid decoration

This category of pot stands is represented by two specimens, both just fragmentarily preserved.⁸ Their surfaces and sections are of a uniform grey color. One has a distinct decoration of parallel, slanting incisions set in a vertical composition (Fig. 8: 6). The middle band, bordered by two vertical lines, consists of vertical chevrons. All grooves were filled with a white inlay. This pot stand was fired at 900-1000 °C. The other specimen was decorated with bands of horizontal chevrons filled with a white paste (Fig. 8: 5). One of the chevron bands was located on the rim. The pot stands’ ware is homogenous, with no visible coarse inclusions.

3. Dark grey burnished jars

Compared to the burnished bowls, burnished jars are a much less abundantly represented category of the Jazirah Burnished Ware from Tell Arbid (only 4 diagnostic fragments have been registered). As the vessels have been preserved in small fragments (usually the rim with a part of the neck) it is hardly possible to reconstruct the form of the complete vessel. Jars have dark grey surfaces, carefully burnished and shiny. In some cases, the dark surface was achieved by smudging.

⁸ Being slimmer than the other pot stands, they should perhaps be regarded as high-stemmed vessels.

COMPARISONS AND ANALOGIES

Jazirah Burnished Ware finds are rare in the Upper Khabur region. Taking into account the scarcity of Jazirah Burnished Ware and its typological and technological distinctiveness in comparison with typical pottery products of the late Ninevite 5 period in the Jazirah region, the question of provenance of this type of pottery needs to be addressed. In search of the roots of Ninevite 5 period Jazirah Burnished Ware, attention may be directed towards Anatolian pottery tradition and to the Early Transcaucasian Ware, known also by the name of Karaz Ware or Red Black Burnished Ware, which dominated in Eastern Anatolia in the Early Bronze Age. Handmade red and/or black burnished ware belongs to Early Bronze Age Anatolian and Early Transcaucasian pottery tradition. Among Early Transcaucasian Ware parallels to Jazirah burnished bowls can be found. Carinated bowls with everted rims are known from sites in the Malatya-Elazığ region, such as Pülür/Sakıyol, Değirmen-tepe and Norşuntepe (Koşay 1976: 75; Duru 1979: Pls. 27: 3, 29: 2, 31: 11; Hauptmann 1982: Pl. 45: 6), and from Transcaucasian sites, where they are usually equipped with one or two loop handles, e.g. at Kvatskhelebi, Kulbakebi and Beshtasheni (Sagona 1984: Figs. 29: 7, 8, 30: 1, 3). Among the Early Transcaucasian Ware repertoire of forms, there are also bowls that – although not of the same type as the Jazirah orange burnished bowls – share with them the distinctive ridged outer profile.⁹

The forerunners of Tell Arbid burnished pot stands can be sought both among the Transcaucasian pot stands and the so-called fruitstands (high stemmed bowls) of Anatolia, as well as among Ninevite 5 pot stands. These vessels share some features with the pot stands from Tell Arbid, such as a burnished surface, cut windows and white inlays. Burnished pot stands belong to the Early Transcaucasian Ware repertoire. Some have incised, relief or fluted decoration. However, fenestration is not a feature typical for Transcaucasian pot stands and rarely puts in an appearance among the pottery from that tradition.¹⁰ Pot stands from sites in the Upper Euphrates region also have a white-inlay decoration. The best known examples of elaborately decorated dark grey burnished pot stands, some with white inlays, come from Pülür/Sakıyol in the Keban region (Koşay 1976: 62-63, 81-82). The usage of burnished fruitstands seems to be connected with an Anatolian tradition.¹¹ Burnished fruitstands (some with fenestrated stems and incised decoration), or high pedestals of bowls with rectangular or circular “windows” can be encountered among Anatolian pottery (Orthmann 1963: Figs. 4, 5, 40, 44, 77; Hout 1982: 72, 236, 296). Triangle-fenestrated fruitstands, both burnished and wet-smoothed, can be found at Arslantepe VIA and Tepecik, in the Malatya-Elazığ region, as well as at Hassek Hüyük, where they were found in Late Chalcolithic layers within a context of Uruk-related pottery (Esin 1976: Pl. 72: 4; Esin 1982: Fig. 72: 32, 33; Frangipane and Palmieri

⁹ Bowls with ridged profile can be encountered e.g. at Korucutepe (van Loon 1978: Pls. 114: C, D, 115: C), Değirmen-tepe (Duru 1979: Pls. 27: 4-7, 31: 6, 9, 12) and Norşuntepe (Hauptmann 1982: Pl. 50: 1-2).

¹⁰ A fenestrated pot stand was found at Tepecik (Esin 1979: Fig. 64: 32).

¹¹ Apart from Anatolia, grey burnished fenestrated fruitstands, interpreted as incense burners, appear also in Early Bronze Age I Palestine (“burnished ware”) (Amiran 1969: Fig. 10: 6-8).

1983: Figs. 28: 8, 29: 3; Helwing 2000: Fig. 5). Among Ninevite 5 pottery, fruitstands with fenestrated stems can be found both painted and plain (Tell Rijim) (Bieliński 2003: Fig. 6: 1, 3, Fig. 8).

The characteristic arrow-shaped “windows” featured on some of the burnished pot stands from Tell Arbid seem to be connected with a Ninevite 5 pottery tradition. Arrow-fenestrated pot stands, made in keeping with north-Mesopotamian technology, are popular among late Ninevite 5 pottery at the site. They can also be encountered in late Ninevite 5 period layers at Tell Brak and Tell Hamidiye in the Upper Khabur region (Matthews 2003: Fig. 5.72: 7; Eichler et al. 1990: 316, Abb. 106). Direct predecessors of the arrow-fenestrated pot stands can be sought in the triangle-fenestrated pot stands from the incised and excised phase of the Ninevite 5 pottery. Fenestrated pot stands from Tell Jigan, Tell Thuwajj, or Mohammed Arab are additionally adorned with an incised decoration (Li 2003: Fig. 3: 15; Numoto 2003: Fig. 24: 88; Bolt and Green 2003: Fig. 21: 04). Triangle-fenestrated pot stands have also been found at Girnavez, in the south-eastern Turkish province of Mardin.¹² Fenestrated pot stands (some of the pot stands having cut triangles, e.g. those from Abu Salabikh and the Diyala region) and fruitstands with fenestrations have been attested in southern Mesopotamia from the times when the Ninevite 5 culture flourished in the north (ED I, EDII and beginning of ED III) (Delougaz 1952; Moon 1987). South Mesopotamian fruitstands, typical for the ED II and ED III periods, are lavishly decorated, not only with the “windows” but also with incised motifs and applied figures, usually located at the stem of the vessel.

Black burnished ware with white-filled incisions belongs to an Anatolian pottery tradition. It has been attested for the Early Bronze Age in western Anatolia (e.g. Troy, Beycesultan) (Hout 1982: 599-603) and Cilicia (Tarsus) (Goldman 1956: 95-96, 110-111, Figs. 240: 88-91, 257, 258). Also some of the vessels from central and northern Anatolia are decorated with white-inlaid patterns (e.g. İkiztepe, Büyük Güllücek) (Koşay and Akok 1957; Alkim et al. 1988: 182-183). Among Early Transcaucasian Ware, white-filled patterns can be encountered not only at Pulur/Sakyol, where they had been used for decorating pot stands, but also, e.g. at Tepecik and Taşkun Mevkii, in the Elazığ region (Esin 1976: 115, Pl. 72: 2; Sagona 1994: Fig. 29: 6), at Gelinciktepe (Palmieri 1967: Fig. 17; Palmieri 1973: Fig. 44), in the region of Malatya, and at sites connected with the Early Transcaucasian culture in the Amuk region (where white-filled incisions were predominantly used for decorating lids) (Braidwood and Braidwood 1960: 368).¹³

NINEVITE 5 AND JAZIRAH BURNISHED WARE: CROSS-POTTERY CONNECTIONS

The Jazirah Burnished Ware and late Ninevite 5 pottery provide an opportunity for studying diffusion of pottery traditions resulting from cross-cultural connections.

¹² Triangle-fenestrated pot stands are presented in the Mardin Archaeological Museum.

¹³ Furthermore, some of the burnished vessels described as “Transcaucasian Ware” found at sites in the Jazirah (such as Tell Brak and Tell Chuera) were also decorated with white inlays (Orthmann et al. 1995: Abb. 31: 125; Oates et al. 2001: 160-161, Figs. 191, 400).

Arrow-fenestrated pot stands and round-sided bowls with beaded rims are forms that appear at Tell Arbid within two different pottery traditions, each based on a different technology – in the north-Mesopotamian tradition, connected with Ninevite 5 pottery and in the Anatolian or Transcaucasian tradition. Both pottery traditions differ in technological aspects, such as firing conditions, color and preparation of the pottery paste, as well as sources of clay used for the production of vessels. Buff, wet smoothed, round-sided bowls with beaded rims are one of the most typical forms in the late Ninevite 5 repertoire, well represented in the Tell Arbid assemblage. A similar form is also present among burnished vessels with grey and brownish surfaces. As far as the form is concerned, the two technological variants differ only in the bases; the buff bowls usually have flat bases, whereas in most of the burnished bowls the bases are rounded.

Also the characteristic motive of arrow-shaped fenestrations was used for decorating both the dark grey, white-inlaid burnished pot stands, and the wet-smoothed, buff pot stands. While the burnishing and the white inlays appears to stem from an Anatolian and Transcaucasian tradition, the motive of arrow-shaped fenestrations seems to originate from the Ninevite 5 pottery tradition. This assumption is supported by the geographical and chronological horizon of this motive – the Upper Khabur region and the late Ninevite 5 period. The white-filled, incised, herringbone-like motive appearing in the decoration of the burnished pot stands resembles motives known from the Ninevite 5 pottery. Horizontal zig-zags can be encountered both in Ninevite 5 pottery and in Early Transcaucasian Ware.¹⁴

Similar cross-cultural pottery connections in the late Ninevite 5 period can also be observed in the ceramic assemblage from Tell Brak. There is a marked resemblance between some pieces of the white-inlaid “Transcaucasian” Ware from Tell Brak and Ninevite 5 vessels. Again, some forms are present both in the “Transcaucasian” and in the Ninevite 5 collections and the decoration of the “Transcaucasian” variety has parallels among the Ninevite 5 ware (Oates et al. 2001: 16). At Arslantepe VIA, in the Malatya region, fruitstands with high fenestrated stems appear both among buff, wheel-made pottery of Mesopotamian origin, and in the handmade red-black burnished ware variant which belongs to an Anatolian and Transcaucasian pottery tradition (Frangipane and Palmieri 1983: Figs. 28: 8, 34: 7). Fruitstands from Arslantepe VIA were found in layers from the Late Chalcolithic period, a time of interactions between the local Anatolian cultural tradition and the south-Mesopotamian Uruk culture.

PROVENANCE AND TECHNOLOGY

Laboratory tests performed on the Jazirah Burnished Ware from Tell Arbid with a view to establish the Jazirah Burnished Ware provenance proved that the vessels had been made of local marly clay.¹⁵ Within the analyzed material, six raw material groups were

¹⁴ Zig-zags adorned some pot stands from Pulur/Sakyol (Koşay 1976: Pls. 81: 328, 82: 324).

¹⁵ The tests were made by M. Daszkiewicz (chemical characterization by WD-XRF).

distinguished. The provenance of pottery can be identified not only by the chemical composition of clay or diagnostic vessel forms but also by the technological aspects of its production. This is the case also with the Jazirah Burnished Ware. Apart from the burnished surfaces, other relevant technological questions are firing conditions (reducing atmosphere, smudging and predominantly low firing temperatures) and coloring (being the result of the chemical composition of clay combined with the firing conditions). Smudging is a very special method of firing; within the whole pottery assemblage from Tell Arbid its usage has been noticed only in the case of the Jazirah Burnished Ware. It was used for all forms of Jazirah Burnished Ware vessels – pot stands, carinated bowls and jars. A connection between smudging, with the resultant blackening of vessel walls, and burnishing of the wall surfaces has been observed in many pottery traditions, also outside the Near East.

Most Jazirah Burnished Ware vessels were fired at low temperatures. Among the 10 analyzed samples, four were fired at 600-100 °C, another four at 700-800 °C, one at 800-900 °C and a grey pot stand with white inlays at 900-1000 °C. Most of the Jazirah Burnished Ware vessels are grey or dark grey – a result of firing in a reducing atmosphere or of smudging. Among the 45 vessels from Tell Arbid, 31 are grey or dark grey, and the remaining 14 are orange or brown. Grey is not a typical color of Mesopotamian pottery. Being made of calcareous clay and fired in an oxidizing atmosphere, it is usually buff, salmon-pink, pale brown, or olive-green (in the case of ceramic fired at high temperatures). In the late Ninevite 5 period, the only other pottery type distinguished by its grey (and orange/brown) color is the Metallic Ware, the production of which began in that period (EJ II).

A considerable technological diversity is characteristic for the Jazirah Burnished Ware; it is often noticeable within one pottery type (especially taking into account the relative scarcity of the Jazirah Burnished Ware at Tell Arbid, compared with the amount of the Ninevite 5 pottery). Although the burnishing of surfaces was a must, there was no standard procedure for the preparation of pottery paste or firing conditions. Also the raw material used was not standardized (clay from six different sources). Judging by this diversity, we can assume that at Tell Arbid, there was no standardized or centralized production of Jazirah Burnished Ware vessels, but rather that they were manufactured to satisfy the individual needs of a small group of the site's inhabitants.

JAZIRAH AND EASTERN ANATOLIA: CROSS-CULTURAL CONNECTIONS

The presence of the Jazirah Burnished Ware in the Khabur region can be interpreted as a result of cross-cultural contacts between this region and that of the Upper Euphrates and Tigris in the late Ninevite 5 period. Long-lasting interactions between eastern Anatolia and the Jazirah were based primarily upon exchange, driven by an uneven distribution of natural resources. After a time of intensive contact in the Late Chalcolithic (Late Uruk) period, a reversal towards a more local development is noticeable. This results in a regional differentiation, manifesting itself, among others in the appearance of several ceramic provinces (Lupton 1996; Rova 1996; Marro 2000). In

the first half of the 3rd millennium BC (EJ I-EJ II) in northern Mesopotamia (foremost in the Tigris region and eastern Khabur basin) Ninevite 5 pottery develops in its painted, incised and excised and late excised varieties. Beginning with the EJ II, Metallic Ware appears (for the most part, in the western Khabur basin) alongside late Ninevite 5 pottery. The ceramic assemblage from the Upper Tigris and Euphrates regions, in the EB I is dominated by a pottery tradition of Transcaucasian origin distinguishable by its burnished surfaces, known as the Karaz Ware or Red-Black Burnished Ware, which appears alongside ceramic of a Syrian tradition (Plain Simple Ware, Late Reserved Slip Ware and cyma recta cups) (Sagona 1984; Conti and Persiani 1993; Marro 1993; Marro 1997). In the EB II, as in EB I, pottery of Transcaucasian origin still outnumbers other varieties. An important trait of the EB II ceramic assemblage in the Upper Tigris and Euphrates is the appearance of painted decoration (Karababa Painted Ware, Elazığ Painted Ware and Gelinciktepe Painted Ware) and the presence of Metallic Ware. The Transcaucasian pottery that dominated in Eastern Anatolia throughout the Early Bronze Age is rarely found in the Jazirah. This region lies outside the Early Transcaucasian culture, which spread from the Caucasus and Eastern Anatolia towards north-western Syria, Palestine and north-western Iran.

In the late Ninevite 5 period, contacts between the Jazirah and Eastern Anatolia are still in evidence although they clearly lose in intensity compared to the Late Chalcolithic period. Inter-regional interaction can be noticed in the distribution of pottery. Besides Jazirah Burnished Ware, other pottery varieties are indicative of the contacts, such as Ninevite 5 pottery with late excised decoration, Metallic Ware and painted Anatolian ceramic. The distribution of this pottery can mark the route along which the contacts occurred and reveal the backbone of ancient exchange between the two poles of Eastern Anatolia and the Jazirah. Beginning with EB II, Metallic Ware vessels were present in the Malatya-Elazığ region, although they were quite unevenly distributed between the various sites (Arslantepe, Norşuntepe, Tepecik, Değirmentepe) (Conti and Persiani 1993: 363, Fig. 12: 6; Duru 1979: Figs. 26: 33-37, 28: 20-36, 41: 27, 28 and 42: 20-28; Hauptmann 1979: 72; Hauptmann 1982: Figs. 46: 8-9, 49: 12; Esin 1982: 107; Yener 1980: 103-118). Also the Diyarbakır region has yielded some Metallic Ware; laboratory analyses of these finds pointed to their connection with Metallic Ware compositional groups distinguished in the Khabur region (Schneider 1989: Fig. 2; Marro and Helwing 1995: 363-365).¹⁶ Eastern Anatolia (Malatya-Elazığ, Karababa and Diyarbakır regions) has yielded the second largest number of Metallic Ware (after northern Mesopotamia). Different groups of painted pottery with east-Anatolian affiliations are only occasionally present in the Jazirah region (Marro 1993; Marro and Helwing 1995; Marro 1997; Boileau 1998; Rova 2000). Karababa-like Ware is much better represented, with just a few examples of potsherds resembling the Elazığ Painted Ware found.¹⁷

¹⁶ Metallic Ware have been found i. a. at Salat Tepe (Ökse and Görmüş 2006: 177).

¹⁷ Sherds resembling Elazığ Painted pottery have been found at Tell Chuera and Hamman et-Turkman (Curvers 1991: Fig. 3: 6176; Kühne 1976: no 376-378). Most Karababa Painted Ware finds concentrate in the middle Khabur valley (where they appear along late Ninevite 5 pottery) as well as at Hammam et-Turkman and Tell Chuera (Marro 1993;

Ninevite 5 incised and excised pottery has not been attested in the Malatya-Elazığ region; it has, however, been found in south-eastern Anatolia.¹⁸ Several sites with Ninevite 5 pottery (both painted, and incised and excised) were registered in a survey of the Cizre-Silope plain (Algaze 1991: 196). A large collection of Ninevite 5 pottery with excised decoration comes from Girnavaz, a site near Nusaybin, in the Turkish province of Mardin, which lies by a route leading from Eastern Anatolia towards the south, along the Jagjag river (Erkanal 1988: 151; Erkanal 1989: 267, Pl. 11; Uysal 2008: Figs. 2-4). Analogies for the Ninevite 5 pottery from Girnavaz can be found among vessels with late excised decoration from north-eastern Syria, among others from Tell Arbid. Surveys around Girnavaz have registered a few more sites with Ninevite 5 period settlement (Uysal 2008: 314). Examples of Ninevite 5 pottery with excised and incised decoration are known also from the Diyarbakır region (from around Batman Su) where they have been discovered, i.a. at Ziyaret Tepe, Salat Tepe and Giricano (Matney et al. 2003: 179; Matney and Somers 1999: 215, Fig. 3; Ökse and Görmüş 2006: 181, 186, Fig. 35; Schachner 2004: 541, Fig. 22). These sporadic discoveries draw the northern border of the area into which Ninevite 5 pottery with late excised decoration has found its way.

These ceramic parallels can mirror a trans-regional network of exchange between the Khabur and Upper Tigris and Euphrates regions. For the resources-poor Mesopotamia, Eastern Anatolia seemed an attractive partner, rich in metal sources (copper, silver, gold and lead), obsidian and almost unlimited (as it must have seemed in the 3rd millennium BC) forest resources. There is little evidence for considerable wide-spread usage of metal by Ninevite 5 period societies. Data from the late Ninevite 5 period dwelling quarter at Tell Arbid (Area D) confirm this opinion. No metal objects have been found there, but flint and obsidian were in frequent use. For example, eight obsidian tools have been found, which makes almost 1/3 of the chipped stone tools assemblage (the majority of tools were made of flint). The sources of the obsidian can be sought, among others, in Eastern Anatolia (the Nemrud Dağ lava flows by Lake Van).

An important link in the contacts between the Jazirah and the Upper Tigris and Euphrates was provided by the Diyarbakır region, which may have played the role of a middleman in the trade in different resources, such as the obsidian from Lake Van area, and copper, silver or other metals extracted near Ergani and Keban by the Upper Euphrates. A confirmation of contacts between the Upper Khabur and the Diyarbakır regions in the 3rd millennium BC can be found in the presence in both regions of such pottery types as the Metallic Ware, Ninevite 5 pottery, burnished “Transcaucasian” Ware and Dark-rimmed Orange Bowls (characteristic for the EJ IIIb-EJ V period). The intricate net of connections between these two regions encompassed Tell Arbid. The site functioned, as did many others in the Upper Khabur region, as a “gateway” center streaming men and goods, as attested by the ceramic finds; besides local Ninevite 5

Marro 1997). Malatya-Elazığ Painted ware, characteristic for the EB III in the Upper Tigris and Euphrates region, has not been found in the Jazirah.

¹⁸ In the Malatya-Elazığ and Karababa regions, ceramic forms related to the early Ninevite 5 pottery have been found. Most of the vessels are plain, with just a few examples bearing painted decoration (Behm-Blancke 1988).

pottery and Metallic Ware the site has yielded also Jazirah Burnished Ware and Dark-rimmed Orange Bowls.

When considering the character of the relations between the Upper Khabur region and Eastern Anatolia, one needs to take into account the interaction between nomads and settled population, linked with the seasonal wanderings of pastoralists between the mountainous regions of Eastern Anatolia and the steppes of northern Mesopotamia. The nomads of Eastern Anatolia led their herds to winter pastures down to south-eastern Anatolia or the Upper Khabur region, and returned to the mountains for the summers (Cribb 1991; Yakar 2000). During their seasonal stay in the Upper Khabur region, some exchange of goods between the nomads and the local settlers must have taken place, which led also to cultural borrowings of, among others, pottery traditions.

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Fig. 1. Jazirah Burnished Ware: grey carinated and orange hemispherical bowls with ridged profile. Tell Arbid, late Ninevite 5 period.

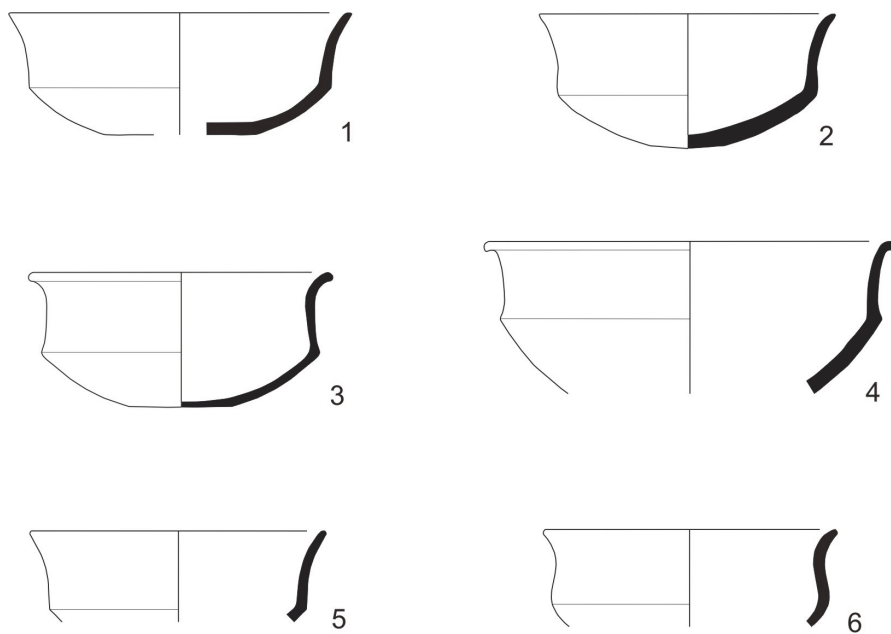


Fig. 2. Grey burnished carinated bowls. Tell Arbid, late Ninevite 5 period.

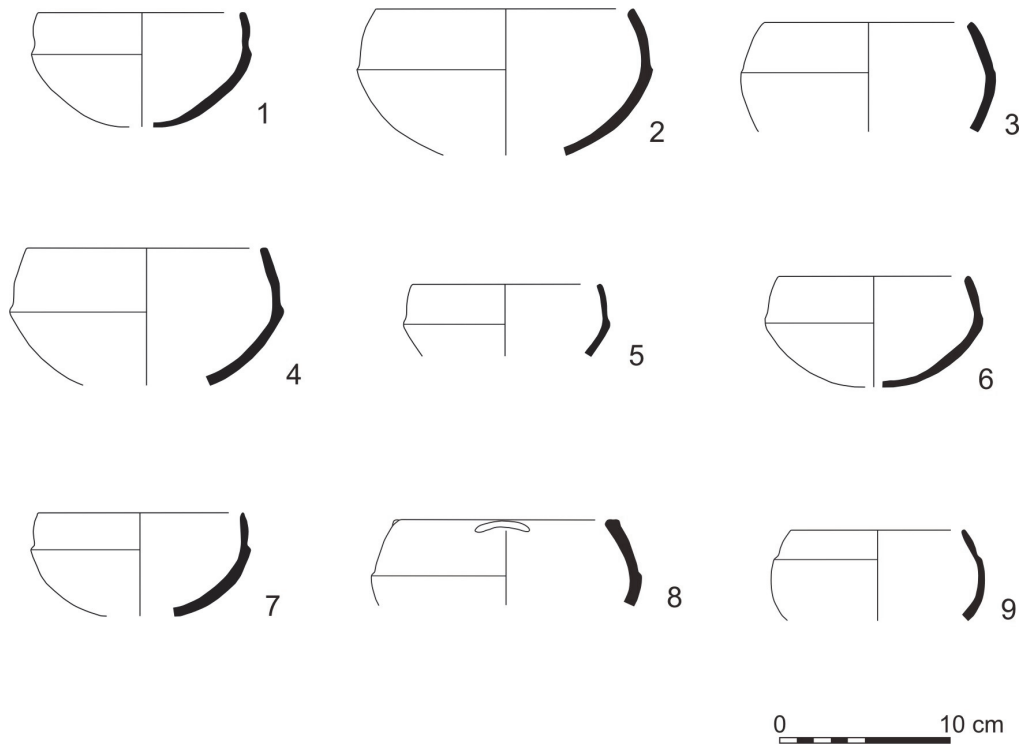


Fig. 3. Orange burnished, hemispherical bowls with ridged profile. Tell Arbid, late Ninevite 5 period.

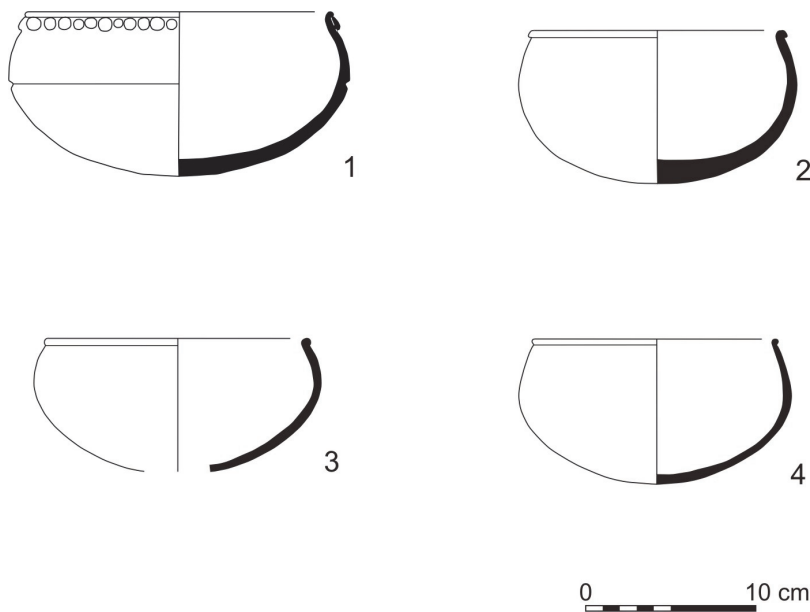


Fig. 4. Burnished, round-sided bowls with beaded rims. Tell Arbid, late Ninevite 5 period.



Fig. 5. Grey burnished, round-sided bowl with beaded rim. Tell Arbid, late Ninevite 5 period.



Fig. 6. Grey burnished, round-sided bowl with beaded rim and clay "flakes".
Tell Arbid, late Ninevite 5 period.



Fig. 7. Brownish burnished, round-sided bowl with beaded rim. Tell Arbid, late Ninevite 5 period.

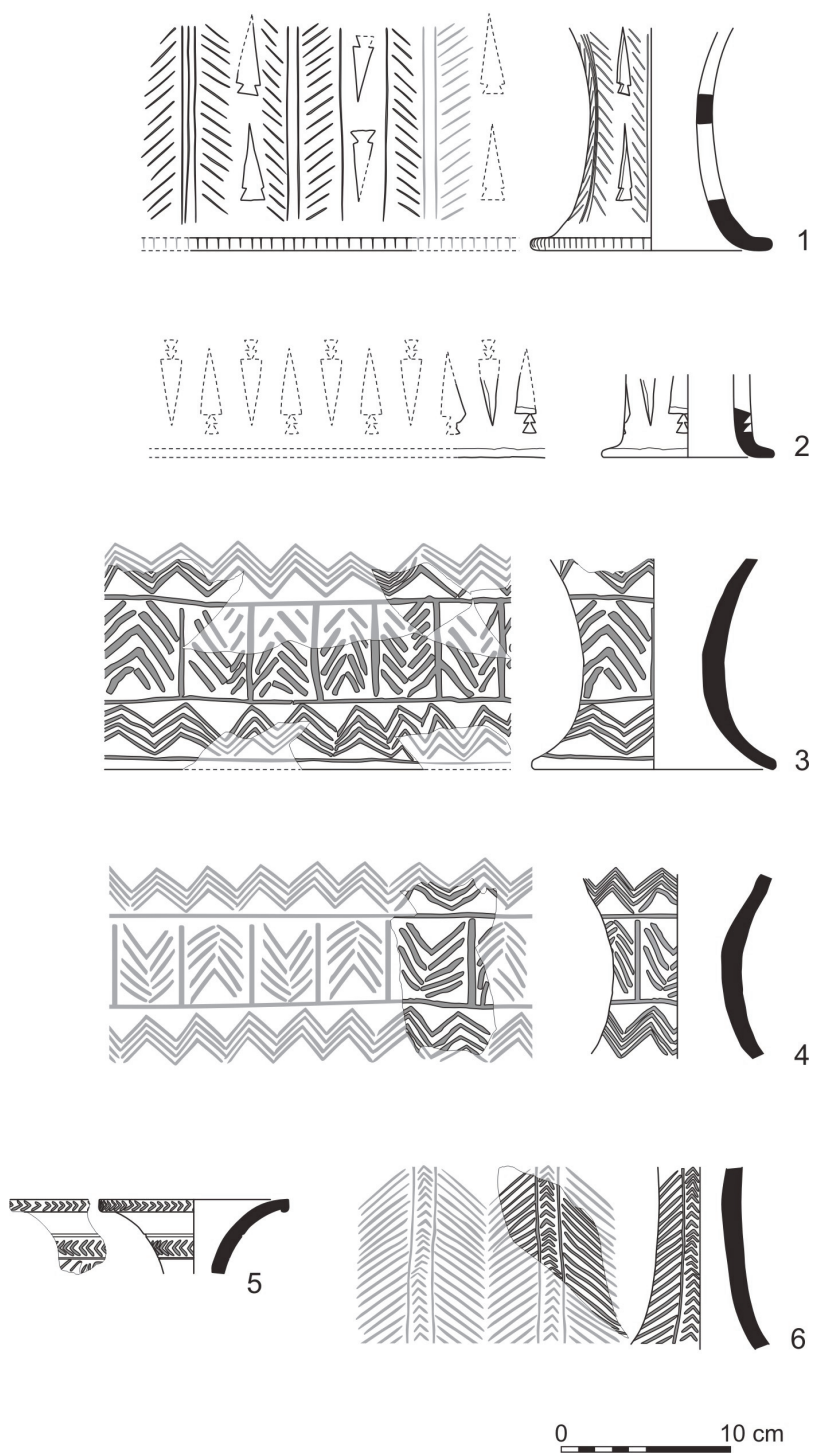


Fig. 8. Burnished pot stands. Tell Arbid, late Ninevite 5 period.

SOME REMARKS ON THE DATING OF THE ANDAVAL STELA Palaeographic and iconographic analysis

Silvia Balatti

Abstract

The ANDAVAL stela represents one of the typical Neo-Hittite monuments in which hieroglyphic writing signs and iconographic elements complement each other. Since its rediscovery on June 25th 1890, many scholars have dealt with either the bas-relief of the male head or the Luwian hieroglyphic inscription, both depicted on the ANDAVAL lithic surface. The aim of this paper is to show how only a complete analysis of iconography, palaeography and content may suggest a plausible dating hypothesis for the monument. Such an all-accomplished investigation implies comparative studies especially among the Neo-Hittite monuments coming from Tuwana, Southern Cappadocia which are datable to the 8th century B.C. According to its “archaic” iconographic and palaeographic characteristics, the ANDAVAL stela may have been one of the first monuments realized in the Neo-Hittite kingdom of Tuwana. A dating of the piece to the 9th-very early 8th century B.C. is highly probable.

1. INTRODUCTION

The ANDAVAL inscription, nowadays exhibited at Ankara Anatolian Civilizations Museum¹, is one of the most interesting Neo-Hittite artifacts stemming from the region of Niğde in Southern Cappadocia (Turkey). The inscription is carved on a stela which had been cut out as a sort of clypeus. This part of the original monument was re-used as a decorative element built into the floor of the Church of Constantine and Helena (6th-12th century A.D.) at ancient Andabalis, modern Aktaş².

On the clypeus four lines of a Luwian hieroglyphic inscription are partially preserved surrounding a bas-relief of a man's head in profile (Fig. 1 a-b). The text can be quoted as follows (Hawkins 2000: 515):

1. §1 EGO [...s]a-ru-[w]a/i-ni-sa IUDEX-wa/i-ni-sa na-hi-ti-ia-
wa/i-ni-śa(URBS) DOMINUS-ia-sa
2. §2 wa/i-mu | wa/i-ra/i-[pa]-si-sá [...s]a || [...]x
§3 [a]-wa/i (TERRA+LA+LA) wa/i-li-ri + i-tà-ti | REL ARHA
(PES)u-sa-wa/i

¹ A good mold of the stele may be observed at the Niğde Museum.

² Aktaş is a village about 9 km to the north-east of the city of Niğde. Ramsay was the first who noticed and sketched the monument on July 25th, 1890. The drawing of the piece was published three years later by Ramsay and Hogarth. See Ramsay-Hogarth 1893: 84-85, fig. 14.

- §4 *a-wa/i* | (EQUUS)*á-su-wa/i-za za-ti la-pa-ni-wa/i*
 §5 *|wa/i-ma-tà x-[...]-ta[...]|*
 3. ...*]x[...]* *ARHA* [...] (figure) *wa/i+ra/i-pa-la-wa/i-ha* [...
 4. ...] | *MAGNUS+RA/I-nu*-[...

“I (am) [S]aru[w]anis the ruler, the lord of the city Nahitiya.

And I ...

And when (?) I shall bring (it) out of the plains,

I shall (summer-) pasture the horse-
 herd here,

and (for) me it [...

...] and Warpalawas[...] make great
 [...”

In spite of the presence of many gaps, the name Saruwanis and his titles *tarwanis*, lord of the city Nahitiya³ (l. 1. §1), and *warpasi* (l. 2. §2), are clearly legible. The narration seems to pursue some actions of Saruwanis regarding the treatment of a horse-herd, possibly part of a troop. On the third written line, behind the human head, the personal name Warpalawas is possibly found, but the context is irreparably lost and the meaning of the series *wa/i+ra/i-pa-la-wa/i-ha* (l. 3.) in the sentence is open to different interpretations.

The preserved bas-relief represents the head of a man with hair and a shaved face with one hand pointing to his nose. The facial features are incised, well-underlined and characterized by a round-shaped eye, a big ear and a prominent nose. The hair-style, with a cap of curls lightly rounded and lengthened in shape and a big curl falling on the neck, seems to be the most relevant iconographic element of the relief (see below, §3, §5).

Although probably only a part of the original monument remains⁴, this part is well-preserved and is the object of the following palaeographic and iconographic investigation.

2. OVERVIEW OF PREVIOUS PALAEOGRAPHICAL INVESTIGATIONS

The stela of ANDAVAL had been discovered quite early, and therefore its inscription has been studied by most of the scholars who have worked on Luwian

³ Nahitiya was probably the Hittite ^{URU}*na-hi-ta* and should correspond to the modern Niğde. See Del Monte-Tischler 1978: 279.

⁴ It is only possible to see most of the first and second line of writing and just a part of the third and fourth lines straddling the man's head figure facing right.

hieroglyphic⁵. The presence of an iconographic representation together with the inscription provides an opportunity to analyze both image and text in order to define the dating of the monument.

In his *Manuale di eteo-geroglifico* (1966-75: 12-13, and Tav. II), Meriggi focused on the textual content of the four fragmentary lines of writing. He first worked on the titles of Saruwanis, the main character of the ANDAVAL inscription, whose name had been already restored by Hrozný (1937: 408-410) from NİĞDE 1⁶ (Fig. 2 a-b). According to Meriggi, Saruwanis was “the just (?)⁷ lord of Nahitiya⁸” carrying in addition the unusual religious title of *warpasis*, meaning a kind of cult minister⁹. The question of the correct interpretation of the titles attributed to Saruwanis is fundamental in understanding his role and his social position inside the local society. As a matter of fact, there are no clear references to Saruwanis as a king. Concerning the title *tarwanis*, it also appears in some other inscriptions coming from the region of Niğde. In BOR (l. 1.) and BULGARMADEN (l. 1. §2) the name Warpalawas, the well-known king of Tuwana during the late 8th century B.C.¹⁰, is associated with the titles hero and king. In BOR (l. 2.) Muwaharanis, another king of Tuwana, is associated with the title *tarwanis* but the passage is quite damaged and it is impossible to detect whether other titles are represented. In spite of this, NİĞDE 2 (l. 2) provides further attributes of Muwaharanis, characterizing him as a king and a hero. Again in NİĞDE 2 (ll. 3-4.) the title *tarwanis* refers once more to Warpalawas, “the *tarwanis*, the hero”. In BULGARMADEN (l. 1.) it is connected to Tarhunazas, “the *tarwanis*, the son of Tarhuwara, the ... servant of Warpalawas”. According to the text, in the latter example the title does not clearly refer to a king but rather to a ruler under the command of king Warpalawas. This also occurs in other incidences of the term in the HL corpus of texts and suggests an understanding of *tarwanis* as a personal quality, an epithet, rather than an official title.¹¹

⁵ On ANDAVAL, see: Ramsay-Hogart 1893: 84-85 fig. 14; Messerschmidt 1900: H.4 27 fig. 31c; Hrozný 1937: 408-410; Gelb 1939: 22f fig. 2s; Laroche 1960: 87f; Meriggi 1967-75: 12f fig. 32; Ussishkin 1967: 197-202; Orthmann 1971: 219f; Jasink 1995: 137f; Berges-Nollé 2000: 104-105; Hawkins 2000: 515 and Aro 2003: 323.

⁶ NİĞDE 1 is a drum-shaped statue base with a one-line hieroglyphic inscription discovered on the *höyük* of Niğde and attributable to Saruwanis. See Hawkins 2000: 513.

⁷ Meriggi translated the title IUDEX-*wa/i-ni-sa* with the Italian adjective *giusto* (“just”). Hawkins prefers the substantive “ruler” (Hawkins 2000: 515). *tarwanis* is a well-known Neo-Hittite title but its real meaning is still uncertain. The term is analyzed in Pintore 1979 and 1983; Jasink 1998; Giusfredi 2009.

⁸ The connection between the Neo-Hittite *na-hi-ti-ia*-(URBS), the Hittite ^{URU}*na-hi-ta* and the modern city of Niğde had already been shown by Gelb. Gelb 1935: 17, Fig. 1.

⁹ Nowadays Jasink’s hypothesis appears to be likely. The title *warpasi-/warpali-* is connected with *warpi*, probably a specific intellectual gift granted by the deity and useful for ruling. This attribute could bestow a sort of religious *pietas* to one had received the title (Jasink 1995: 94-97). See also more recently Giusfredi 2010: 137, for a wider spectrum of hypotheses.

¹⁰ King Warpalawas is mentioned in the inscriptions of BOR, BULGARMADEN, İVRİZ 1, İVRİZ 2 and NİĞDE 2 and is represented on the reliefs of BOR and İVRİZ 1. He appears also as Urballa (^m*ur-bal-la-a*) of Tuwana in Tiglatpileser III’s list of tributary kings (738-732 B.C.), ARAB I, 722, and as Urpala (^m*ur-pala-a*) in a letter of Sargon II to Aššur-šarru-usur, governor of Que (710-709 B.C.). See Tadmor 1994: Ann. 3, 6; Ann. 14*, 1; Ann. 27, 7; St. III A, 12; Summ. 7, r. 9’ and SAA I: 1, 26; 1, r. 43.

¹¹ See Jasink 1998a; Giusfredi 2009: 140-145.

The term *wa/i+ra/i-[pa-]si-sá* (l. 2. §2) is interpreted by Meriggi as the title of *Ápas*, a cult minister, restored after *wa/i+ra/i-pa-si* DOMINUS-*ia-zi-i* “masters of *warpi*” in KARKAMIŠ A2+3 (l. 16).¹² Hawkins (2000: 515, commentary to §2) agrees with Meriggi’s “convincing restoration” of the meaning of the title and suggests the following reconstruction for l. 2. §2: *wa/i-mu | wa/i+ra/i-[pa-]si-sá* [REX-*ti-s*]a [*á-sa-h*]a (“and I was a *warpasi*-king”), after SUVASA B (Hawkins 2000: 462-463) and HAMA 4. §4 (Hawkins 2000: 403-406). Recently *warpasis* is generally considered to be a gift, a quality given by the deity (Jasink 1998 b: 95), as well as *tarwanis*, and it seems not to be necessarily connected with the status of a king.¹³

Consequently, one should consider Saruwanis to have been a local ruler, possibly a city lord, with an unusual series of titles in comparison with that of the later kings of Tuwana, Muwahanis and Warpalawas. Instead of the trinomial sequence “the *tarwanis*, the king, the hero”, the titles attributed to Saruwanis do not seem to make explicit reference to a royal figure and pertain possibly to an older tradition. With regard to Saruwanis, the second line of the inscription (l. 2. §4) shows a clear connection between the character and a horse herd, (EQUUS)*á-sú-wa/i-za*. The nature of this relation is not explicit but the reference may concern the breeding of a horse herd force used for some kind of military actions. On this point, a comparison with the inscription of TOPADA may be suggested; in fact the lines 8-9 of TOPADA quote: “... and he went (and) with all his horse and army raised his own frontier here (?), and put (it) on the mountain” (Hawkins 2000: 451-461). Nevertheless, a breeding activity for commercial or prestige purposes may not be excluded with certainty. This is true especially if one considers the importance of horses as luxury goods during both the 2nd and 1st millennium B.C. and of Cappadocia as a horse-breeding and trading region.

Concerning the original location of the monument, *za-ti* (l. 2. §4) “here” could suggest that the stela was erected in the same place where Saruwanis led his horse herd to pasture (*la-pa-ni-wa/i*) after moving it from the plains where it was before.¹⁴

An additional relevant aspect was underlined by Meriggi. In the lower preserved part of the text, interrupted by the relief and extremely incomplete, it is possible to read the word *warpalawaha* (l. 3). The scholar suggested that *wa/i+ra/i-pa-la-wa/i-ha* (l. 3.) should be interpreted as the first person singular preterit of a verb *warpala-* and it would have been used to render a particular action linked to the cavalry (Meriggi 1966-75: 13). At the time of Meriggi’s text edition, İVRİZ 2 had not yet been discovered¹⁵, and therefore it was thought, on the basis of a fragmentary passage of BOR¹⁶, l. 1., that

¹² For KARKAMIŠ A2+3 see Hawkins 2000: 108-112.

¹³ Evidence that *tarwanis* was not a royal title already in the earliest attestations is discussed in Giusfredi 2010: 91-95. On the other hand, see Hawkins 1995: 39, who suggests a derivation of the ideogram IUSTITIA from the 2nd millennium sign *LABARNA*.

¹⁴ For the relationship between the environmental conditions of Southern Cappadocia, horse breeding and the stela of ANDAVAL see Balatti-Balza, in press.

¹⁵ The damaged and yet unpublished inscription of İVRİZ 2 quotes clearly in the first writing lines Muwahanis as Warpalawas’ father. See Dinçol 1994: 117-125 and Berges-Nollé 2000: 101-102.

¹⁶ Actually the broken passage of BOR seems to quote Muwahanis and not Saruwanis as Warpalawas’ father.

Saruwanis could have been the father of Warpalawas, king of Tuwana. Starting from this suggestion, Meriggi thought that the father had given his son the name of an important event which had occurred during his reign, possibly a military victory. In any case, because of the filiation reconstructed in BOR, Meriggi considered that ANDAVAL directly preceded the reign of Warpalawas and therefore it should be dated to the first half of the 8th century B.C.

All these points are discussed by Hawkins in his re-edition of the inscription (Hawkins 2000: 514-515, fig. 291). The general meaning of the text is maintained even if a more accurate linguistic study of the single words is provided. With reference to the series *wa/i+ra/i-pa-la-wa/i-ha* at l. 3, Hawkins translates it as: "... and Warpalawas" (*Warpalawa-ha*), but in the commentary notes he adds that: "the recognition that Warpalawas' father was not Saruwanis, as had been supposed, but Muwaharanis, does make the appearance of the name Warpalawas in an inscription of Saruwanis less-likely" (Hawkins 2000: 516). Nonetheless, Hawkins considers Saruwanis to be a predecessor of Warpalawas of Tuwana¹⁷ and dates the inscription palaeographically to the 8th rather than the 9th century B.C.

3. OVERVIEW OF PREVIOUS ICONOGRAPHICAL INVESTIGATIONS

Also the bas-relief in the center of the stela has been dealt with by scholars, who analyzed the iconographic features of the man's head, in particular the hair and the shape of his curls. Already in mid-20th century Akurgal (Akurgal 1949: 23), dated the male head to the second half of the 8th century B.C., based on the presence of the spiral curls. He thought the king's hair-style was typically Assyrian and it was a common opinion that artistic Assyrian features penetrated into the Neo-Hittite monuments only as of Tiglath-Pileser III's military campaigns to the West (738-732 B.C.). This reconstruction was based on the drawings of the monument published by Ramsay and Hogarth in 1893 (Ramsay-Hogarth 1893: 84-85, fig. 14) and Messerschmidt in 1900 (Messerschmidt 1900: 27 H. 4, fig. 31c).

Akurgal's dating was refuted by Ussishkin (Ussishkin 1967: 197-202) who observed that the drawings of ANDAVAL used by Akurgal had the curls which were really depicted in 8th century Assyrian style, but the photographs of the relief by Turaev (Turaev 1901: 240, fig. V) and Gelb (Gelb 1935: 18, fig. 1) both re-published by Gelb in 1939 (Gelb 1939: 22, fig. II 3) showed a different kind of curls. So he preferred an earlier

¹⁷ Hawkins (2000: 515) suggests two alternative reconstructions of the royal genealogy of Tuwana in the 8th century B.C.:

A	Saruwanis	B	Saruwanis
	???		???
	Warpalawas I		Muwaharanis I
	Muwaharanis		Warpalawas
	Warpalawas II		Muwaharanis II

He considers the option B more likely because the monuments referring to Warpalawas/Urballa are homogeneous. This second reconstruction is commonly accepted.

dating for ANDAVAL, probably in the mid-9th century due to the shape of the curls (Fig. 3). He showed that this shape was a typical Neo-Hittite stylistic feature, well-represented in reliefs from Karkemiš, Til Barsip and Zincirli dating to the 10th-9th century B.C. According to Ussishkin, there was an “Assyrianisation” of the Neo-Hittite curls that became progressively rounder under the expansion of Assyrian influence during the campaigns of Assurnasirpal II and Salmaneser III. Furthermore the scholar suggests that this influence was completed in the 8th century B.C. when the curls became spiral in shape.

With regard to the drawings of the relief realized by Meriggi, Ussishkin and Hawkins, it has to be pointed out that neither Meriggi’s nor Ussishkin’s drawings show the hand of the figure pointing to its nose, but Hawkins’ does. One should assume that this latter version is accurate, even though this part of the relief is badly disturbed.

Orthmann (Orthmann 1971: 219-220) dealt with the ANDAVAL stela only briefly, in a short paragraph together with the reliefs of ÇİFTLİK, İVRİZ and Kemerhisar (BOR) and proposed a later date for the monument again (*Späth III*-around 8th century B.C.)¹⁸. In his comments he admits that the stylistic features of the male head of ANDAVAL surely have to be dated at least before the mid-8th century B.C., but he does not agree with Ussishkin’s hypothesis and, to solve the dating problem, he suggests the possibility that the piece was realized by a local sculptor with a “primitive” taste (Orthmann 1971: 220). This suggestion was surely influenced by the fact that at that time Saruwanis was thought to be the father of Warpalawas, whose reliefs were dated to the second part of the 8th century, as they still are.

Finally, Aro has turned her attention to the features and to the dating of Saruwanis’ head. She hints at the hypothesis of Ussishkin, who analyzes the bas-relief from an iconographic point of view, and Hawkins, who considers the palaeographic features of the inscription. Her conclusions are that: “The style, especially the rendering of the curls, shows old features comparable with the 10th century reliefs from Karkemiš, while the palaeography of the script would suggest a later date in the 8th century” (Aro 2003: 323).

4. NEW INSIGHTS ON PALAEOGRAPHY

In the following contribution the stela of ANDAVAL will be reconsidered starting from a comparison of its main palaeographic and iconographic features with the other Neo-Hittite monuments from Southern Cappadocia. In fact, some elements point to a political and administrative homogeneity in this territory from the Late Bronze Age to the Iron Age and beyond¹⁹. Starting from these premises, it is worth carrying out an in-depth-investigation in the palaeography and iconography of this group of monuments to detect those elements which could hint at different periods of production or the coexistence of

¹⁸ Orthmann used the same general date of *Späth. III* referring to all this group of reliefs (ÇİFTLİK, ANDAVAL, BOR and İVRİZ 1).

¹⁹ See d’Alfonso 2010 and d’Alfonso-Mora-Tomassini Pieri (in press), and references therein.

different ateliers. Here the peculiarities of the palaeography and the *ductus* of the ANDAVAL stela will first be analyzed.

On the circular surface four registers of writing with incised cursive signs are preserved (Berges-Nollé 2000: 104-105; Hawkins 2000: 514-515). The inscription is introduced by the relief figure pointing to itself according to the iconographic version of the sign *1 or *2 (EGO-EGO₂) to be read *amu* ("I am"). The sign has in this case a double function and underlines the relevant position of the main character, whose status and actions are celebrated by the text. Although damaged, the inscription seems to begin in the right-higher edge and it continues from the right to the left running *boustrophedon*. The cursive shape of signs and the structure of the stela are already clear elements for a dating of the monument during the Neo-Hittite period. This dating is confirmed by the presence of some word-dividers and by the fact that most of the signs of ANDAVAL are syllabic; the few ideographic signs are generally well-known and part of widespread titles or nouns such as IUDEX-*wa/i-ni-sa*, (URBS) DOMINUS-*ia-sa*, or determinatives such as (TERRA+LA+LA)*wa/i-li-ri+i-tà* and (EQUUS)*á-su-wa-iz-za*. While these evidences clearly suggest a dating of the inscription within the 1st millennium B.C., they are not precise enough to identify a more specific period of execution. For this scope a more detailed analysis and a comparison with the other inscriptions of *the southern group of Tabal* (Hawkins 2000) seems necessary (Table 1). The great attention attached to details in executing the shape of signs, their thin, stretched execution and their tidy disposition on the writing surface are typical of both ANDAVAL and NIĞDE 1. This kind of accurate style of cursive is very different from the abstract and swift sign style of BOR, İVRİZ fragments and BULGRAMADEN. Since the latter inscriptions date to nearly the end of the use of the hieroglyphic script, the two inscriptions bearing the 'accurate style' should precede them.

In addition, on the last inscriptions, such as BOR and BULGRAMADEN, the presence of word-dividers is extremely abundant, more or less after every word and generally at the top of the writing line. In ANDAVAL the use of dividers is neither regular nor frequent; the sign *386 (word-divider) occurs only six times in the four preserved text lines. In NIĞDE 1, the other Saruwanis' text, *386 and other signs used as word-dividers are totally lacking.

Analyzing the shape of the signs, *19 (*á*) and *433 (*sá*)- as carved on NIĞDE 1 and ANDAVAL- differ from the attestations on BOR and BULGRAMADEN. Interestingly, the form of these signs on NIĞDE 2 tends to be closer to ANDAVAL and NIĞDE 1 than to BOR and BULGRAMADEN. This and similar cases seem to support an earlier dating of the NIĞDE 2 stela²⁰. Beside *19 and *433, other signs show different shapes appearing between ANDAVAL and the later inscriptions: the shape of *329 (REL; *kwi/a*) is really simple in ANDAVAL, more complex in İVRİZ fragments, BOR, BULGRAMADEN and PORSUK; *390 (DOMINUS) in ANDAVAL is quite different from its representation in BULGRAMADEN and PORSUK; The inner hyphens of *371

²⁰ See in more detail Mora-Balatti 2011.

(IUDEX, IUSTITIA) in ANDAVAL and NĠĠDE 2 are horizontal, while they are vertical in BOR and BULGARMADEN.

*450 (*a*) of ANDAVAL has a similar shape in PORSUK and VELĠISA but not in BULGARMADEN and BOR. In this case, however, it is the function of the sign within the text which marks a difference. In the late inscriptions it appears many times as an ‘ending-word marker’ (exactly twelve times in BULGARMADEN, six in BOR). On the contrary, ANDAVAL is the only inscription of the group in which the sign has just its syllabic value *a*. Probably *450 lost its previous value to become a reading helper during the last period of the hieroglyphic writing in this region. The examples could be numerous and in general they show a clear palaeographic difference between ANDAVAL (and the short NĠĠDE 1, Fig. 2a) and the Warpalawas’ inscriptions. Among these, the most important evidence is the change in shape of *439 (*wa/i*). This is particularly relevant, because this sign recurs numerous times in most of the HL inscriptions from Southern Cappadocia. Therefore, *439 can be considered a diagnostic sign for the Tuwana group of inscriptions. In the drawings of ANDAVAL realized by Meriggi (Meriggi 1966-75: tav. II, n. 32) and Hawkins (Fig. 1 a) the sign *439 appears in two different shapes (Tab. 1): the first one has a straight stroke and two little squares (two times), the second one has the straight stroke with two little triangles (twelve times). Considering the entire group, the stroke is straight only in NĠĠDE 1 and ANDAVAL, while it always becomes pot-hook in the other inscriptions, above all in BOR, BULGARMADEN and İVRİZ 1. From an observation of the monument some of the signs *wa/i* of the preserved part of the inscription seem to present a little difference in shape. For example the stroke of the third sign *439 of the first written line and of the second sign *439 of the second line could be lightly inclined on the top. This shape might be connected with the sign *wa/i* of VELĠISA and NĠĠDE 2, while, as mentioned previously, the other signs *439 of the *group* are generally characterized by a pot-hook stroke (Tab. 1). If my observation is correct, it is a likely assumption that an evolution in the shape of the stroke from a straight sign to an inclined one and then to a pot-hook sign took place. This hypothesis could indicate that NĠĠDE 1 and ANDAVAL show the most archaic shape of the sign *439 among the inscriptions of Southern Cappadocia.

Since Warpalawas/Urballas was already king of Tuwana in 738 B.C.²¹ and his inscriptions are clearly later than NĠĠDE 1 and ANDAVAL, the mid-8th century B.C. is the *terminus ante quem* for their production.

Hawkins suggested reading the name Warpalawas at 1. 3 of ANDAVAL, but at the same time pointed out that an identification of this Wapalawas with Warpalawas, king of Tuwana after 738 B.C. is nowadays less probable (see above). If one follows the reading of Hawkins, then the most likely explanation would be the existence of another Warpalawas (I), somehow contemporary with/related to Saruwanis, who possibly was the father of Muwaharnis attested in NĠĠDE 2, and the grandfather of the more well-known Warpalawas (II) of İVRİZ, BOR and BULGARMADEN.²²

²¹ Tiglath-Pileser III’s military campaign to Anatolia and Syria is dated 738-732 B.C. See note ¹⁰.

²² See note 17 and Mora-Balatti 2011.

5. NEW INSIGHTS ON ICONOGRAPHY

Beside palaeography, another important element for dating the ANDAVAL stela is represented by the iconographic version of the EGO/ EGO₂ sign. Although only the head and a part of a hand are preserved, it should probably be reconstructed as an entire figure pointing to itself. In fact, according to the typology of other similar stelae, such as ÇİFTLİK and BOR, the monument should have represented the whole body of the male character completely surrounded by writing signs. The round section was probably cut out later for reuse.

Analysing the bas-relief with the man's head in profile, after more than forty years in which so much has changed in the dating of the Neo-Hittite monuments, Ussishkin's conclusions can still be maintained (see above §3, 10th-9th century B.C.). The shape of the curls and the hair-style in general can be still considered the iconographic keys for a dating. As the scholar suggests, this Neo-Hittite depiction of curls is visible in some monuments from Til Barsib²³, Zincirli ("Äußerer Burgtor") and Karkemiš datable from the late 10th-early 9th century B.C.²⁴. Among them, the reliefs of the dynasty Suhi-Katuwa²⁵, especially KARKEMIŠ A11a (Hawkins 2000: 94-100, fig. 10-12), A11b (Hawkins 2000: 101-108, fig. 14-17), A2 (Hawkins 2000: 108-112, fig. 18-21), A12 (Hawkins 2000: 112-114, fig. 22-23), A13d (Hawkins 2000: 115-116, fig. 24-25) and A23 (Hawkins 2000: 116-117, fig. 26-27), seem to be the most similar to the one of ANDAVAL.

Clear resemblances in the hair-style may also be seen by comparing two male statues from 'Ain al-'Arab (Orthmann 1971: fig. 4 b') and Zincirli (Orthmann 1971: fig. 62 E/1) and above all two heads of statues from Karkemiš (Reimschneider 1954: fig. 67; Orthmann 1971: fig. 32 F/17; Aro in Melchert 2003: fig. XXII) and from Malatya (Orthmann 1971: C/5). All the statues just mentioned are dated by Orthmann to the *Späth. II* period. In regard to Orthmann's dating criteria it is important to notice that he hardly gives any absolute dates for the monuments even if *Späth. II* might correspond to the 9th century B.C. Based on the work of Hawkins, it becomes clear that *Späth. II* has to be pushed upwards chronologically. Bonatz (2000: 13-23) proposes to date the statues between 925 and 875 B.C.

Observing the photos of the monuments from Maraş published by Hawkins, interesting similarities to the hair style of the relief of ANDAVAL may be seen in the iconographic representations of Maraş 8 (Hawkins 2000: 252-255, fig. 106-107), Maraş 4 (Hawkins 2000: 255-258, fig. 108-109) and Maraş 12 (Hawkins 2000: 275-276, fig. 126). The hair of the three figures show no small curls but the same shape of hair with the big curl falling on the neck. Combining iconographic and palaeographic data, Hawkins dates Maraş 8 (Fig. 4) within the first half of the 10th century and Maraş 4 to the mid-9th century

²³ See for example the beard and hair style of the Storm-God represented on the stele of Til Barsib analyzed in Bunnens 2006: 42.

²⁴ The same dating is proposed by Genge, see Genge 1979.

²⁵ See Orthmann 1971: fig. 35 K/28. For the dating see Mazzoni 2000.

B.C. Regarding Maraş 12, only stylistic criteria of dating are available. According to them, Hawkins agrees with Orthmann's dating²⁶ which suggests dating the relief to the early-9th century B.C. Consequently, the three considered stele have to be dated again between the 10th and the mid-9th century B.C. On the contrary, the man in relief of Maraş 9 (Hawkins 2000: 265-267, fig. 125) shows a different type of hair style characterized by round shaped Assyrian curls and a bunch of small curls falling on the neck. In this case, Hawkins' dating proposal is at 800 B.C. or possibly later. The same shape of curls, typically a result of Neo-Assyrian artistic influences, is easily visible in the reliefs of KARKAMIŞ A6 and A7 a-b (Hawkins 2000: 123-128, fig. 31-33). As for Maraş 9 (Fig. 5), the monuments are dated by Hawkins in the late 9th-early 8th century B.C.

On the other hand, considering all the stelae and reliefs of the Tuwana group, the relief of ANDAVAL is the only one with this typical Neo-Hittite shape of curls. As it has been suggested, they were gradually transformed into round Assyrian curls²⁷, as it may be seen in Muwaharanis' NİĞDE 2 and in Warpalawas' BOR and İVRİZ 1 reliefs (Fig. 6 a-b-c). Considering the comparanda, and in particular those of the monuments from Karkemiş (Fig. 7-8), a dating of the style of the hair-shape as early as the 10th-9th century B.C. should be maintained. This can be asserted, as it seems an Assyrian influence on the hairdressing in the Neo-Hittite bas-relief starts as of the mid-9th century B.C. and continues until the end of the 8th century B.C.

Apart from the hair style, a glance at the nasal and eye shape of the character represented in ANDAVAL should briefly be taken. Looking carefully at the photo published by Hawkins (Fig. 1 b) or at the drawings by Ussishkin (Fig. 3) and Meriggi the nose of Saruwanis appears quite large in size and distinctly marked. These features may again be connected with the ones of the stelae realized during the reign of Katuwas mentioned above. Maraş 8 and 12 both show big noses but different in shape. The prominent nose of the male head of ANDAVAL seems to vaguely resemble the extremely big noses of the reliefs from Guzana/ Tell Halaf, in northern Syria, rather than the small ones of the Neo-Assyrian reliefs. On the contrary, once again, the nasal shape of the characters represented in KARKEMIŞ A6 and 7, in Maraş 9 as well as in BOR may be linked to the typical Neo-Assyrian model.

With reference to the form of the single eye of the ANDAVAL male head in profile, it seems to be depicted in the regular oval shape which also characterizes the eyes of the above mentioned male statue from Zincirli and the head of the statue from Karkemiş (10th-9th century B.C.). On the contrary, the late-8th century Neo-Hittite depictions, such as the reliefs of BOR and İVRİZ 1, show a rather asymmetrical almond shape of the eyes. This latter feature is a typical characteristic of the Neo-Assyrian iconography.

²⁶ About Orthmann's dating suggestions for all the stelae from Maraş, see Orthmann 1971: fig. 48 e 74 D/5, fig. 45 B/10 and B/15, fig. 47 C/4 and C/7.

²⁷ See Bunnens 2006: 42. "On earlier works, for instance, on some reliefs from Zincirli, the hair is more simply stylized and, on later sculptures, the late Hittite hair-lock is progressively replaced, under Assyrian influence, by locks consisting of a spiral ending in a volute".

It is likely that Assyrian artistic features spread in Near-Eastern art together with the growth of Assyrian power and the campaigns of Assurnasirpal II and, above all, Salmaneser III (Ussishkin 1967: 200). Since the Middle Euphrates entered from this time on into the Assyrian sphere of influence, it is worth considering that this stylistic feature entered in the Neo-Hittite artistic production of Karkemiš and the neighbouring lands some decades before its use in the iconography of the western and northern territories. If this particular shape of hair became part of the iconographic representations of Karkemiš, Til Barsib, Sam'al or Melid in the mid-9th century B.C., it is possible that the peripheral valleys near Tuwana remained bound to the previous Neo-Hittite artistic models for a longer time span.

Assyrian royal texts (RIMA A.0.102, Grayson 1991-96) inform us that Salmaneser III campaigned in Southern Cappadocia in the third quarter of 9th century B.C. Although Salmaneser's military campaign forced the Anatolian reigns to pay tribute to the Assyrians and it was the first important step for the following conquest of the north-western territories, direct control and influence on the local powers are far from being demonstrated. The region named Tabal by the Assyrians was located in a peripheral territory, beyond the Taurus Mountains and opened to the central Anatolian area.

Therefore, while most of Ussishkin's assumptions on the development of the Assyrian curls in Neo-Hittite art are correct and reasonable, it is not necessarily true that: "This monument must be dated to a period before the beginning of Assyrian influence in Tabal" (Ussishkin 1967: 201)²⁸, before mid-9th century B.C., as it seems to be the case for the Middle Euphrates region. The penetration of artistic influence should be considered as a more complex and slower phenomenon, possibly completed here only with the military and political efforts promoted by the Assyrians from the reign of Tiglatpileser III. Salmaneser's campaign of 836 B.C. cannot be taken as a *terminus ante quem* for the adoption of the typical Neo-Hittite curls carved on the ANDAVAL stela. If a later reception of Assyrian stylistic features in the Anatolian figurative art is accepted, the stela of ANDAVAL could also have been realized after that date. In addition, Saruwanis was probably a simple "lord" of a peripheral city, who would celebrate his actions and legitimate his power in accordance with the local traditions and through the well-known Neo-Hittite ways: the bas-relief on stela and the use of the opening EGO sign²⁹. The role of Tuwana became more important and "international" first with his successors, when it acquired a key position between the Assyrian Empire and the Phrygian reign. At this point there was a development of the new artistic features influenced both by Assyrian

²⁸ In some cases the assumptions of Ussishkin could be excessively strong. For example, in a discussion about the monuments coming from Til Barsib he concludes in note: "The portrayal of the Neo-Hittite curls in these monuments is chronologically significant, because the Assyrian conquest and annexation of Til Barsib in 856 B.C. serves as *terminus ante quem* for the dating of all Neo-Hittite monuments found there" (Ussishkin 1967: 200 note²⁵). On the same topic Bunnens is more cautious and suggests that: "... the Assyrian conquest did not put a complete end to the Luwian tradition at Tell Ahmar" (Bunnens 2006: 53).

²⁹ This type of stela, with the main character pointing to himself as an EGO sign, was common in the Neo-Hittite monumental tradition developing after the fall of the Hittite Empire and during the Dark Ages at the beginning of the 1st millennium B.C. See Araras' and Katuwas' inscriptions from Karkemiš and from Maraş, Tuleil, Çiftlik and Bor.

and Phrygian cultures, as may be seen clearly in the reliefs of İVRİZ and BOR (Fig. 9 a-b and 10).

In spite of this, looking at the other monuments coming from Tuwana, it is clear that the new hair style arrived during the reigns of Muwaharanis and Warpalawas approximately from the mid-8th century B.C. So, in the present author's opinion, it is possible to date the head of ANDAVAL between the 9th and the early 8th century B.C.³⁰

6. CONCLUSIONS

The sum of the foregoing iconographical and palaeographic considerations, observed within their historical and political context, may lead to a likely dating of the stele of ANDAVAL, though the elements are scanty and the monument is fragmentary. As previously suggested, the stele probably has to be dated between the 9th-early 8th century B.C. and it is feasible to hypothesize that Saruwanis was one of the several local rulers of the region at that time. Although Saruwanis was mentioned in ANDAVAL as "lord of the city Nahitiya" and both of his fragmentary monuments were found near the modern city of Niğde³¹, a connection with the following kings of the neighbouring Tuwana, modern Kemerhisar, is probable. In spite of that, there are evident palaeographical and iconographical stylistic differences between ANDAVAL and the monumental remains of Muwaharanis and, above all, of Warpalawas. This distance in style also seems to suggest a temporal distance of completion of the monuments. The social and cultural environment producing ANDAVAL was probably peripheral, interested in local fights between neighbouring cities and characterized by more traditional artistic models. When ANDAVAL was produced, the region of Tuwana was not yet a strategically positioned reign, fundamental for controlling the Central Anatolian plain through the Cilician Gates.

An example may better clarify what is meant to be a stylistic distance between ANDAVAL and the monuments belonging to king Warpalawas. The stele of BOR (Fig. 10) consists of the figure of Warpalawas facing left with twelve lines of a hieroglyphic inscription running *bustrophedon* in the background (Hawkins 2000: 518-521, fig. 296). At first sight a similarity of the structure of the stele with ANDAVAL and the typical Neo-Hittite iconographic models may easily be identified, though the details of the figure are sensibly different. In BOR the Neo-Hittite model of a standing character pointing to himself is strongly influenced by Assyrian and especially by Phrygian artistic features. The close-fitting embroidered cap, the fringed decorated tunic, the headgear and the rich jewellery which characterize the image of Warpalawas are clear evidence of the Phrygian artistic influence on a previous iconographic pattern³² and consequently a proof of the link between Warpalawas' reign and Mida's court. This relationship, both political and

³⁰ This is also the first hypothesis of Aro for an iconographic dating of ANDAVAL. See Aro 1998: 92-93.

³¹ The round base of NIĞDE 1 was discovered on Niğde citadel; ANDAVAL was found 9 km to the north-east of Niğde.

³² See Prayon-Wittke 1994: 67-69 and the relief of İVRİZ 1.

cultural, seems to have been unique in the Neo-Hittite contemporary history and art production. With the exception of the shape of curls, typically Assyrian and usual in most of the Neo-Hittite productions of the 9th-8th century B.C., many characteristics of Warpalawas' monuments seem to have been introduced for the first time by the king himself. The sign EGO², realized in a monumental way according to a Neo-Hittite habit, has become in BOR a relief more than a writing ideogram. While in ANDAVAL the figure is plainly pointing to itself, according to the usual iconography of the sign EGO, in BOR the king seems to be in an attitude of prayer, as in İVRİZ 1. In fact, in these two last cases king Warpalawas is not touching his nose, but rather making a fist-like gesture, which more resemble the Assyrian praying gesture. The above mentioned differences in executing the relief in BOR, its new iconographic motifs and its refined execution underline that there were important changes, both political and artistic, in the last periods of the reign of Tuwana and that the relief of ANDAVAL has nothing to do with them. On the other hand, some reliefs coming from the region of Tuwana, such as NİĞDE 2 (Berges-Nollé 2000: 102-103; Hawkins 2000: 526-527), KEŞLİK YAYLA (Berges-Nollé 2000: 103; Hawkins 2000: 531) and Gökbez (Berges-Nollé 2000: 103-104), seem to share many more features with Warpalawas' monuments and their ideological meaning. In conclusion, it seems to be clear that the stela of ANDAVAL has to be linked to a previous artistic local model spread in the area before the kingdoms of Mida and Warpalawas and before the strong influences coming from both Assyria and Phrygia.

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Fig. 1a. ANDAVAL inscription,
drawing after Hawkins (Plate 291).



Fig. 1b. ANDAVAL,
photo after Hawkins (Plate 291).

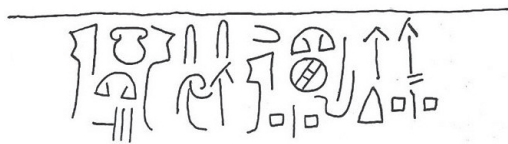


Fig. 2a. NIĞDE 1 inscription,
drawing after Hawkins (Plate 290).



Fig. 2b. NIĞDE 1,
photo L. d'Alfonso.



Fig. 3. ANDAVAL, drawing after Ussiskhin.

	N1	A	N2	V	Iv1A	Iv1B	Iv1C	IvFr1	IvFr2	IvFr3	B	Bgm	Pk
*19													
*329													
*371													
*390													
*433													
*439													
*450													

Table 1: List of the mentioned hieroglyphic signs in the *southern Tuwana group* of inscriptions. N1 = NİĞDE 1; A = ANDAVAL; N2 = NİĞDE 2; V = VELİİSA; Iv1 A-B-C = İVRİZ 1 A-B-C; Iv Fr1-2-3 = İVRİZ Fragments 1-2-3; B = BOR; Bgm = BULGARMADEN; P = PORSUK.



Fig. 4. Maras 8 stela,
photo after Genge (Taf. VIII, C1).



Fig. 5. Maras 9 stela,
photo after Hawkins (Plate 125).



Fig. 6a.: NIĞDE 2 inscription, detail, photo S. Balatti.



Fig. 6b. BOR inscription, detail, photo after Hawkins (plate 296).



Fig. 6c. İVRİZ rock relief, detail, photo L. d'Alfonso.



Fig. 7. Karkemiš, head fragment of a statue after Riemschneider (Plate 67).



Fig. 8. Karkemiš stela, photo L. d'Alfonso.



Fig. 9a. İVRİZ, drawing after Hawkins.



Fig. 9b. İVRİZ, photo S. Balatti.



Fig. 10. BOR,
photo L. d'Alfonso.

JOINS, DUPLICATES, AND MORE FROM THE UNPUBLISHED BO 9000-FRAGMENTS

Oğuz Soysal

Introduction

Shortly before the publication of the cuneiform edition *Keilschrifturkunden aus Boghazköi 60* (1990), the final volume of this series, all Boğazköy tablets bearing the siglum “Bo” were transferred from the Staatliches Museum in Berlin to the Museum of Ancient Anatolian Civilizations in Ankara in 1987. In this article the first results are presented of the research on some unpublished fragments from the range between Bo 9536 and Bo 9736¹.

1. Bo 9721

CTH 14(.V.C) “*Fragments relatifs aux guerres syriennes: nomment Yarim-Lim, Atradu, Hammurabi*”

Bo 9721 (NS), a small, one-sided fragment of historical nature can be described as an example of the well-known Old Hittite composition “Syrian Wars”. The precise CTH numbering of the related fragments is to be assigned as follows:

CTH 14.V.A: KBo 12.14 (NS)

14.V.B: Bo 5262 (NS; obv.² 5'-8' duplicate “A” obv. 4'-6')

14.V.C: Bo 9721

The fragment “C” can be the same tablet of “A” or “B”; however, a physical or contextual confirmation is not yet possible.

¹ These fragments are taken from material currently being considered for a monograph-in-progress entitled “*Unpublished Bo-Fragments in Transliteration*”. In December 2010 and May/November 2011 I conducted my research in the Museum of Ancient Anatolian Civilizations in Ankara, where I took digital photos of Bo 9000-fragments. As part of my duties in the CHD-Project, between January and April 2011, I prepared transliterations of the texts in question, whereby I noticed a number of joins and duplicates of some important Hittite compositions. In February 2011, the first results were submitted to the *Konkordanz der hethitischen Keilschrifttafeln* (<http://www.hethport.uni-wuerzburg.de/hetkonk/>) and they are now found under their relevant text categories. I wish express my sincere thanks to the director of the Museum of Ancient Anatolian Civilizations Melih Aslan, the deputy director Nihal Tırpan, and curators İsmet Aykut, Dr. Şerife Yılmaz, Filiz Akman, Mine Çifçi and Başak Yıldız for their constant assistance during my time there. Furthermore, I am indebted to Dr. Gabriella Stivala (Mainz) who has very kindly generated the joins of nos. 2, 3, 5, 9, 16 and 18 through image processing. The manuscript has been generously edited by Linda Wheatley-Irving and Joanna Derman.

All abbreviations employed here are those of *The Chicago Hittite Dictionary* (1980 ff.)



Bo 9721.

§ 1' 1'] ḫa-da-an-da¹ -[
 2'] ma-am-ma-an^{UR} ḫu¹ [^{UR} ḫu¹ [
 3'] na-at-ta ḫu-i[š² -
 4' (-)š]a²-aš^{URU} A-na-š[a-ap-ri(-)
 5']-x-ir-lu²-na-aš(-)[
 6' -l]i²-ma-a[n(-)
 (bottom of the tablet)

Commentary

Line 2': Conjunctive *mamman* (**mān*+*man*; *CHD* 3/2 [1983] 141) would be another Old Hittite attestation beside KBo 3.24 + KBo 53.275 obv. 20'; see O. Soysal, *N.A.B.U.* 2006/1, 15-16.

Line 3': One expects the old/archaic phrase *natta ḫu(i)šnu-* "to not let (someone) live/to not keep alive".

Line 4': For^{URU} Anašapri, possibly a town outside of the Anatolian domain, see KBo 12.14 rev. 7 and Bo 5262 rev. 2'; O. Soysal, *ZA* 95 (2005) 142.

Line 5': The signs in this line can not be interpreted meaningfully as a Hittite word; however, it is possible that they belong to a non-Hittite geographical name as in the previous line.

Line 6': A restoration with [^m*Ia-ri-im-l*]i-ma-a[n(-)...], the name of the king of Yamḥad, is conceivable. The shorter spelling *-li-ma-* instead of *-li-im-ma-* is attested as ^m*Ia-ri-im-li-ma*(-)[...] in KBo 12.13:6'.

2. Bo 9673 + KBo 5.3

CTH 42(A) "Traité avec Hukkanna du Hayasa"

Bo 9673 lines 1'-8' directly join KBo 5.3 II 76-83 (NS). KBo 5.3 + Bo 9673 II 77-85 are duplicate to KUB 23.73 + KUB 26.37 + KBo 19.44a obv. 3'-9' (NS) from where the restorations are taken.



Bo 9673.

Image processing of the join
Bo 9673 + KBo 5.3.

Obv. II

- § 13 76 (= 1')](-)x ku-ua-pí
 77 (= 2') [(IT-TI^d)UTU-ŠI](-)「x²-x」 pár²-ki-ja-an-za-ma
 78 (= 3') [...-z(a² ku-ua-pí na-aš-šu-ma-k)án ku-ua-pí-i(k)]-「ki」 an-da pí-i-e-mi
 79 (= 4') [... -(x A-NA KARAŠ ku-ua-pí)-i]k-ki an-da pí-i-e-mi¹⁾
 80 (= 5') [(i-d)a-a-lu-un me-mi-an] iš-ta-ma-aš-ti
 81 (= 6') [(na-an-mu ma-a-a)n Ú-UL ḥ(a-at-ra-a-ši z)]i-ig-ga-mu-uš-ša-an
 82 (= 7') [(lam)-ma(r Ú-UL)] a-ar-ti
-
- § 14 83 (= 8') [(na-aš-ma-x² ŠA²) K(UR^{URU} Ḥa-ja-ša-ma nu i-d)]a-a-lu-un me-mi-an
 84 (= 9') [iš-ta-ma-aš-ti (ku-i-ša-aš i)]m-ma k[(u-iš)] me-mi-a[(š)]
 85 (= 10') [(nu-mu-uš-ša-an ma-a-an) lam-mar Ú-UL a-a]「r-t」[i ...]「x² x²」[
 (from here on Bo 9673 breaks off)

Text critical notes

- ¹⁾ Duplicate KBo 19.44a + obv. 5': pí-ja-mi.

Translation

The translation of these passages now reads, with small additions to G. Beckman, *Hittite Diplomatic Texts*² (1999) 30 (there as §§ 20-21), thus:

(§ 13) [...] When with/against [My] M[ajesty ...] is taken away²/removed²; when [...]; or if I send [...] into the ... somew]here; if I send [...] into the army somewhere: if

you hear of an ev[il deed] and i[f] you [do not w]rite it to me and do not arrive at my side in t[im]e (then these oath gods shall destroy you).

(§ 14) Or (in the matter) of the [l]and of Ḫayaša: if [you hear of] an evil deed, whatever matter it would be, and if you [do not ar]riv[e] at my side in t[ime] (...)

Commentary

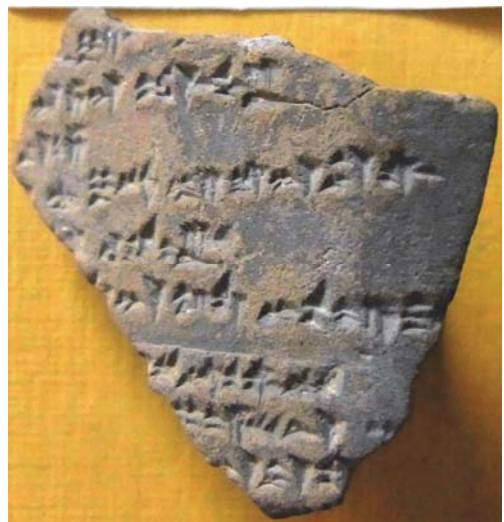
II 77 (= 2'): The damaged sign in *ḫ-ki-ja-an-za-ma* is already visible in its larger form in KBo 5.3 as copied by B. Hrozný. Bo 9673 adds only a small “wedge head”, so that one expects a relatively simple sign here, and I do not have any better reading than “*pár*”. According to the sign traces, J. Friedrich’s [...-a]*k²-ki-ja-an-za-* (SV II [1930] 120) is no longer tenable. Even though the reading *parkiyanza* might be correct, its interpretation within the broken context is still difficult. The translation “taken away/removed” is only a guess; see *park-, parkiya-* CHD P/2 (1995) 155-157.

II 83 (= 8'): According to the photo (BoFN 385) of Bo 2851 (= KUB 26.37) at the *Konkordanz der hethitischen Keilschrifttafeln*, the sign is more likely to be read ŠA “of” than [Š]À “in the midst of” or [I-N]A “in”.

3. Bo 9587 + KUB 14.17

CTH 61(.II.4) “Mursili II. Annales développées”

Bo 9587 lines 3'-9' directly join KUB 14.17 III 1'-7' (LNS), which deal with the conflict between Muršili II and Anniya, the king of Azzi.



Bo 9587.



Image processing of the join Bo 9587 + KUB 14.17.

Rev. III

- § 1' 1' *A-NA(?)^m An-n]i-ḫa x-x¹ (-)[...²]*
 2' *na²]-an-za-an am-me-el*
 3' (= 1') *-i] ḫ² x²ḫ² []-šu-un*
 4' (= 2') *]- ḫ¹ a na-aš ú-i[t] nu I-NA^{URU} Da-an-ku-ya*
 5' (= 3') *[i-ḫa-at-ta-at na-an GU]L-aḫ-ta na-an IŠ-[T]U NAM.RA.MEŠ*
 6' (= 4') *[GU₄ UDU ša-ra-a da-a-aš na-an-kán I]-NA^{URU} Ḫa-ḫa-ša ka[t-t]a-an-ta pé-e-da-aš*
-
- § 2' 7' (= 5') *[GIM-an-ma-at^d UTU-ŠI iš-ta-ma-aš-šu-un n]u-uš-ši ḫa-at-ra-a-nu-un zi-ik-ya-mu*
 8' (= 6') *] a-pí-ḫa-ya-mu-kán Ú-UL ku-ḫi-e-eš-ka₄*
x-[...-i]r LÚ.MEŠ^{URU} Iš-te-te-na-ḫa-ya-mu-kán UL ku-ḫi-e-eš-ka₄ [...²]
 9' (= 7') *zi-ik-ma-ya] ú-it nu-ya I-NA KUR^{URU} Da-an-ku-ya[a]*
 (Bo 9587 breaks off here)

Translation

The translation of these passages now reads, with small additions to R.H. Beal, *The Context of Scripture* II (2000) 87 (*Year 7*), thus:

(§ 1') [... to² Ann]iya [... and²] my [...] it/him. I [...]ed. [But²] he [...]ed; he cam[e] and [marched] to Dankuwa. He [at]tacked [it], and [plundered] it o[f] deportees, [cattle (and) sheep]. He carried [them] do[w]n [i]nto Ḫayaša.

(§ 2') [When I, My Majesty, heard about it], I wrote to him (as follows): “You [...] (to) me [...]. No one [...]e]d there for my sake. None of the people of Ištetena [...]ed] for my sake either. [But you] came and [marched] to Dankuw[a] (...)

4. Bo 9561

CTH 68(N) “*Traité avec Kupanta-^dKAL du pays de Mira et Kuwaliya*”

Bo 9561 (NS) lines 4'-6' appear to duplicate KUB 19.52 IV² (J. Friedrich, *SV I* [1926] § 30†† J) 1'-3', from where the restorations are taken. This proposal I bring forward with a certain reservation. The matching three lines may indicate that Bo 9561 and KUB 19.52 are duplicate; however, this cannot be fully confirmed due to the small size of Bo 9561. If this find is correct, the contents of lines 1'-3' of Bo 9561 may correspond with those of the paragraph not preserved in KUB 19.52 (before line 1') and in any other version of CTH 68; it is to be located in an undetermined gap between § 29† and § 30†† of the Kupanta-Kurunta Treaty as numbered in *SV I* 148-150.



Bo 9561.

One sided

§ 1' 1' p] 𐎶𐎵-ja-an-du²𐎶¹⁾[
 2' -š]i² [
 3' ...

§ 2' 4' (i-ḫ)]a-nu-un [
 5' (ḫal-z)]e-eš-kán-d[(u)²]
 6' (p)]a-aḫ-ši [
 7' (traces)
 (broken off)

Text critical notes

¹⁾ Or less probably 𐎶u-ja-an-du²𐎶 ²⁾ KUB 19.52 IV² 2': ḫal-zi-iš-kán-d 𐎶u𐎶.

5. Bo 9698 + KUB 23.13

CTH 211(4) “*Fragments historiques. Annales*”

Bo 9698 lines 1-3 join directly to KUB 23.13:9-11 (NS). The latter is one of the most exhaustively studied historical fragments in the field of Hittitology; e. g., by F. Sommer, *AU* (1932) 314-319, and later H.G. Güterbock, *FsAlp* (1983) 235-243, A. Süel, *StBoT* 45 (2001) 673 and most recently G. Beckman et alii, *The Ahhiyawa Texts* (2011) 154-157. Nevertheless, its historical contents and dating remain problematic.



Bo 9698.

Image processing of the join
Bo 9698 + KUB 23.13.

One sided

- § 1 9 (= 1)]-x ar-nu-nu-un na-an^{URU}TÚL-na^dUTU-aš URU-ri
ú-ya-te-nu-un
-
- § 2 10 (= 2) ^mLa-b]a-ar-na LUGAL.[G]AL KUR-TU₄ U [L pa-i] t nu NUMUN
^mMu-ú-a-UR.MAḪ
- 11 (= 3) -Y]A² i-ja-nu-un [n]u-uš-ši-kán K[ARA]Š² ANŠE.KUR.RA
ša-ra-a
- 12 (= 4) [u-i-ja-nu-un(?)]
-
- § 3 13 (= 5)]- [x-an] -[n]e-ia-at-ta-at²
- 14 (= 6)]- [k] án LUGAL^{KUR}Aḫ-[ḫ]i-ia-u-[ya(-)...]²
- 15 (= 7)]-x [
- (broken off)

Translation

The present join slightly expands the context of KUB 23.13 in lines 10-12 (§ 2) which now reads as follows:

(§ 2) [...[?] Ever since the days of(?) Lab]arna no Great King went (to) the country (of Šeḫa-River). I made [...], a descendent of Muwa-walwi, [m]y[?] [ally/vassal[?]] and I [sent[?]] up to him an a[rm]y[?] (and) horse(-team).

Commentary

Line 9 (= 1): The additional qualification of “the city of the Sungoddess” is obviously an attempt to differentiate the “holy town” Arinna of Central Anatolia from its namesake city in the Arzawa region; cf. H.G. Güterbock, *FsAlp*, 242.

Line 10 (= 2): The personal name after NUMUN “descendant” has been correctly guessed by F. Sommer, *AU* 314, restored as ^m*M[u-u-ya-UR.MAḪ]*. After the recent join we now have the full name, but it appears with a unique spelling of its initial element ^m*Mu-ú-a-* instead of ^m*Mu-u-ya-*.

Line 11 (= 3): H.G. Güterbock, *FsAlp*, 236 and 242, restores [... LUGAL-*u*]n and suggests a different interpretation “*I made [...] king*”. The broken sign is hard to identify: possibly either an “*un*” or “*ia*”. The newly acquired word *šarā*, from Bo 9698, necessitates a revision of his translation “[*and enjoined him to deliver so-and-so many*] (*teams of*) horses [*and so-and-so many troops*]” as well.

H.G. Güterbock tends to take the author of KUB 23.13 as Tuthaliya IV, whose grandfather (i.e., Muršili II) had finally subdued Arzawa. Beside Tarḫunna-radu, a certain Muwa-walwi is indirectly mentioned in this document as being the ancestor of a ruler of the Land of the Šeḫa-River (PN is not preserved). If this Muwa-walwi is identical with the father of Manapa-tarḫunta, one of the Arzawan treaty partners of Muršili II, then Güterbock’s scenario does work well for interpreting the events described here. The New Hittite script and language with accompanying late lexical features (cf. *glossenkeil* word »*waštazza* in line 4) too would support a dating of KUB 23.13 in the time of Tuthaliya IV.

The historical fact, however, that neither the Arzawa-Union nor the Land of the Šeḫa-River individually were serious problems in Hittite foreign policy after Muršili II, raises questions against Tuthaliya IV’s supposed military operation and subsequent targeting of Tarḫunna-radu, the ruler of the Land of the Šeḫa-River. Moreover, a (Late-) Middle Hittite Ortaköy letter from the time of Tuthaliya II/III, newly published by A. Süel, *StBoT* 45, 670 ff., reveals that a certain Tarḫunna-radu manoeuvred along with other Arzawan leaders against Hittite power. According to A. Süel, *StBoT* 45, 673, Tarḫunna-radu from the Ortaköy letter is the same person mentioned in KUB 23.13, and the author of the latter document is either Tuthaliya II/III, or Šuppiluliuma I, who determined the active and ambiguous political career of Tarḫunna-radu against Hittite interests in the western region. I do tend to share the idea of a (Late-)Middle Hittite dating of KUB 23.13; however, I consider that KUB 23.13 is a heavily “modernized” late copy, and the historical figure Muwa-walwi in KUB 23.13:10 is not the father of Manapa-tarḫunta

under Muršili II. He must be an earlier Muwa-walwi, probably an ancient dynasty founder in the Land of the Šeḫa-River, like the Old Hittite [Lab]arna mentioned in the same line. The strange and archaic spelling ^m*Mu-ú-a-* of the proper name Muwa-walwi would support this hypothesis on the onomastic level.

Furthermore, Tarḫunna-radu from the Land of the Šeḫa-River mentioned in KUB 23.13 and the Ortaköy letter could very well be Tarḫunta-radu, the king of Arzawa in the Amarna letter VBoT 1, who maintains a correspondance with the Egyptian Pharaoh Amenophis III, regarding the terms of keeping a good relationship between both countries. VBoT 1 is compelling evidence for the persistent weakness of the Hittites under Tuthaliya II/III in the Anatolian region and the growing political power of the Arzawa(-Union) led by Tarḫunta-radu. From a linguistic perspective, there is nothing dissuading us from believing that the proper name “Tarḫunta”-radu in the Amarna letter is the original “Luwian” form, as opposed to the “Hittitized” one, “Tarḫunna”-radu, in the documents from Boğazköy and Ortaköy.

6. Bo 9614

CTH 324(.3.F) “Telibinu (mugawar)”

Bo 9614 (NS) lines 1-4 are duplicate to KUB 33.12 IV 7’-11’ (NS); further restorations are taken from KUB 17.10 IV 24-26.



Bo 9614.

One sided

- § 1 1 ... (*nu-za* GU₄.ḪI.A)] AMAR-ŠU
 2 [*pé-en-ni-iš-ta* (UDU.ḪI.A-*ma-za* SILA₄)-ŠU *pé-en-ni-iš*]- ta 𐎶𐎶
 3 [(^d*Te-li-pí-mu-uš-š*)a LUGAL MUNUS.LUGAL DUMU.MEŠ.LUGAL)] 𐎶 KUR^{URU} *Ḫa-at-ti*
 4 [*pé-en-ni-iš-ta nu-uš-za* (TI-*an-ni i*)]*n-na-ra-u-a* 𐎶𐎶 -[(*ni*)]
 5 [EGIR.U₄-*MI kap-pu-u-e-et*]

(broken off)

7. Bo 9582

CTH 343(.7) “La royauté du dieu KAL”



Bo 9582.

One sided

- § 1' 1' (traces)
 2' ^dL]AMMA ṣ-[
 3' -u]n¹⁾ EZE ṚN₄-an] [
 4']-za²⁾ Ú-UL ku-ṽ[a-pí-ik-ki²⁾
 5' ^{HUR.S}]A^A≥G Na-ša-al-m[a(-)
 6' ^{UR}]U Ap(?) -zu-u-i-ṽ[a³⁾ (-)
 7']-ṣ³⁾ ut-tar EGIR-an na[m³⁾ -
 8'] A-NA ^dLAMM ṽA] [
 9' (traces)
 (broken off)

Text critical notes

¹⁾ [a-pu-u-u]n or [ku-u-u]n ? ²⁾ For restoration compare KUB 36.2d III 25'-26' + KUB 33.112 III 19'. ³⁾ Or: t[i-...].

Commentary

Line 5': This mountain is known only from KUB 36.2d+ III 44', another fragment of CTH 343, where it is spelled differently, namely ^{HUR.SAG}Na-“ša”-ma-an; G. F. del Monte - J. Tischler, *RGTC* 6 (1978) 280.

Line 6': If the reading of the first two badly damaged signs is correct, this form may be analyzed as dative-locative ^{URU}Apzuwi-ya “and” to ^{URU}Apzuwa; for attestations see G. F. del Monte - J. Tischler, *RGTC* 6, 28. This city seems to belong exclusively to the Hurrian mythological compositions, e.g., CTH 343 here and CTH 345 “Song of Ullikummi”.

Mention of the deity ^dLAMMA (lines 2', 8') in conjunction with the geographical names ^{HUR.SAG}Našalma (line 5'), and perhaps also *^{URU}Apzuwa (line 6'), secure the assignment of Bo 9582 (NS) as CTH 343. Its precise placement within the text composition, however, is not yet possible. While both geographical names are mentioned in close association here, they never appear together in other fragments of CTH 343. In the line 2' there is mention of a “festival” expressed by the word EZEN₄, which is not found elsewhere in the narration of this composition. Nevertheless, some meal (feast³⁾ scenes are present in § 4 and § 5 (after H.A. Hoffner, *Hittite Myths*² [1998] 46).

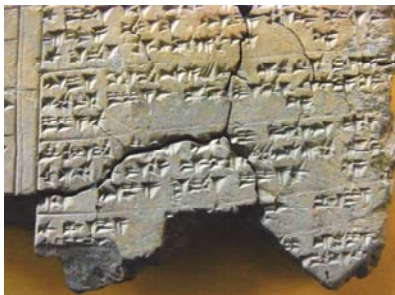
8. Bo 9659 + KUB 36.75

CTH 374(.2.A) “Analogues aux précédentes (i. e., CTH 372-373)”

Bo 9659 lines 1'-4' directly join KUB 36.75 II 18'-21' (MS), an anonymous royal prayer to the Sun-god. Lines 18'-24' are parallel to the Kantuzzili Prayer KUB 30.10 rev. 12-15 (CTH 373.A) as well as KUB 30.11+ rev. 9'-11' (CTH 374.1). When I began my work on the Bo 9000-fragments, Bo 9659 was found already glued to the main tablet. According to I. Singer, *Hittite Prayers* (2002) 112, this join has been made by S. Görke within the context of her M. A. thesis *Das Gebet des hethitischen Priesters Kantuzili* (Freie Universität Berlin, 2000), which is not available to me. In *Hittite Prayers*, 112, this join is mistakenly cited as belonging to CTH 374.1 and not to 374.2.A. KUB 36.75 has been further enlarged by other additional joins KBo 51.15, KBo 52.13 and Bo 4696, see <http://www.hethport.uni-wuerzburg.de/hetskiz/sk.php?f=1226/u>



KUB 36.75 + Bo 9659 obv. II (close up).



KUB 36.75 + Bo 9659 obv. II
(lower part).



Bo 4696 + KUB 36.75 + KBo 52.13
+ Bo 9659 obv. I and II
(KBo 51.15 is not included).

Obv. II

...

§ 8' 18' (= 1') ^{LÚ}DAM.GÀR LÚ-*iš* ^dUTU-*i kat-ta-an* GIŠ.RÍN
 19' (= 2') *har-zi nu* GIŠ.RÍN *mar-ša-nu-uz-zi ú-ga*
 20' (= 3') *A-NA DINGIR-YA ku-it i-ia-nu- un*

§ 9' 21' (= 4') *nu*¹⁾ É-YA [x-x-x-x] -aš¹⁾ É-YA
 22' (= 5') [ki-i-ša] - [a]t

§ 10' 23' (= 6')] [x] []- [m] i ZI-YA(-)x(-)[...]²⁾
 24' (= 7') za-a]p-pí-iš-ki-i[z-zi
 (broken off)

Text critical notes

¹⁾ Cuneiform traces do not fit the word *pít-tu-li-ia-aš* as it reads in KUB 30.10 rev. 14 and expected for here.

9. Bo 9712 + KUB 9.32

CTH 394(C) "Rituel d'Ashella, contre une épidémie dans l'armée"

This is a piece from the missing right edge of KUB 9.32 obv. 25 ff. (NS). A direct join is realized through the word *pidanzi* in the end of obv. 25 on the right edge. Other unpublished fragments Bo 4445 and Bo 4511 join reverse of KUB 9.32, for which see H. Otten, *ZA* 64 (1975) 243-244 and a revised sketch of the tablet at <http://www.hethport.uni-wuerzburg.de/hetskiz/sk.php?f=Bo%202038>



Bo 9712.

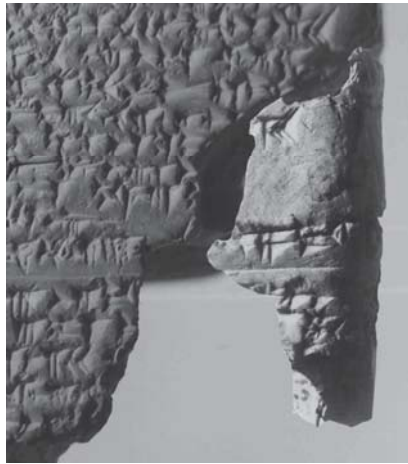


Image processing of Bo 9712 and KUB 9.32.

Obv.

- § 4 25 (= 1') *nam-ma-kán* UDU.ŠIR.ĦI.A¹⁾ MUNUS-TU₄-ia²⁾ NINDA.GUR₄.RA
 KAŠ-ia KARAŠ³⁾ iš-tar-na ar-ḥa 𒀭⁴⁾-d 𒀭 a-ḡn-zi
 26 (= 2') *na-aš* LÍL-ri pé-en-na⁵⁾-an-zi *na-aš-kán* pa-a-an-zi A-NA ZAG LÚKÚR an-dā
 27 (= 3') *ar-ḥa* pí-it-ta⁶⁾-la-an-zi *ku-e-da-ni* pí-dī an-ze-el Ú-UL a-ra-an-[(z)]i⁷⁾
 28 (= 4') *nu-kán* an-da QA-TAM-MA-pát me-mi-iš-kán-zi *ka-a-ša-ṽa-aš-ša-an* ku-ī[(t)⁸⁾]
 29 (= 5') *i-da-a-lu* A-NA A-MI-LU-UT-TI GUD.ĦI.A UDU.ĦI.A
 ANŠE.KUR.RA.MEŠ ANŠE.GÌR.NUN.N[(A).MEŠ⁹⁾]
 30 (= 6') 𒀭 A-NA ANŠE.MEŠ¹⁰⁾ ku-it¹¹⁾ an-da e-eš-ta ki-nu-na-ṽa-ra-at-kán *ka-a-š*[(a)¹²⁾]
 31 (= 7') IŠ-TU KARAŠ *ku-u-uš* UDU.ŠIR.ĦI.A¹³⁾ MUNUS-TU₄¹⁴⁾ ar-ḥa ú-te-er
 32 (= 8') *nu-ṽa-ra-aš*¹⁵⁾-za *ku-iš* ú-e-mi-ia¹⁶⁾-zi *nu-ṽa-za* ki-i 𒀭¹⁷⁾ 𒀭¹⁸⁾ -an a-pa-
 [(a-aš KUR)¹⁸⁾]- 𒀭¹⁹⁾-a 𒀭²⁰⁾ n-za da-a-ú
-
- § 5 33 (= 9') I-NA UD.II.KAM *ma-a-an* lu-uk-kat-ta *ka-ri-ṽa-a-ri-ṽa-ar*¹⁹⁾ ḥu²⁰⁾-d[(a-ak VI
 UDU)]. 𒀭²¹⁾ IR²¹⁾ VI MÁŠ.GA[(L)²²⁾]
 34 (= 10') XII^{DUG} GÌR.KÁN XII GAL.ĦI.A²³⁾ XII NINDA.GUR₄.RA I^{DUG} ḥu²⁴⁾-up-pár
 KAŠ III GÍR.T[(UR ZABA)]R²⁵⁾ ḥa-ḡn-dā-ḡn-z[(i)²⁶⁾]
 35 (= 11') *na-aš* LÍL-ri *nam-ma* da²⁷⁾-me-e-da-ni AŠ-RI pé-en-na²⁸⁾-an-zi k[(i-i-ia²⁹⁾
 ḥu-u-m)] 𒀭³⁰⁾ -[(an)³⁰⁾]
 (text continues in KUB 9.32 obv. 36 ff.)

Text critical notes

¹⁾ Mistakenly transliterated as UDU.ŠIR-aš^{ĦI.A} by A.M. Dinçol, *Belleten* XLIX/193 (1985) 15. The supposed “aš” is in fact the part of the sign “ŠIR” ²⁾ KUB 9.31 III 44: MUNUS-an³⁾ KUB 9.31 III 44: A-NA KARAŠ⁴⁾ KUB 9.31 III 45 and HT 1 III 39:

*pé-e-*⁵⁾ KUB 9.31 III 45 and HT 1 III 40: *pé-en-ni-*^{5a)} HT 1 III 40: omits *A-NA*⁶⁾ KUB 9.31 III 46: *pít-ta-*; HT 1 III 41: *píd-da-*⁷⁾ Duplicate restoration is after KUB 9.31 III 47⁸⁾ Duplicate restoration follows KUB 9.31 III 49 with additional words *ke-e-el ŠA KARAŠ* which seem to be omitted here⁹⁾ KUB 9.31 III 50: omits *MEŠ*¹⁰⁾ KUB 9.31 III 50: *ANŠE.ĤI.A*¹¹⁾ *ku-it* is superfluous here and not to be found in KUB 9.31 III 50 or 51¹²⁾ Duplicate restoration is after KUB 9.31 III 51¹³⁾ Mistakenly transliterated as *UDU.ŠIR-as*^{ĤI.A} in *Belleten* XLIX/193, 16¹⁴⁾ KUB 9.31 III 52: adds *-ja*¹⁵⁾ KUB 9.31 III 52: *nu-ya-ra-at-*¹⁶⁾ KUB 9.31 III 53: *ú-e-mi-ja-az-*¹⁷⁾ KUB 9.31 III 53: *i-da-a-lu*¹⁸⁾ Duplicate restoration follows KUB 9.31 III 54¹⁹⁾ KUB 9.31 III 55: *ka-ru-ú-ya-ri-u-ar*; KUB 41.17 III 5': *[k]a-ru-ú-a-ri-ya-ar*²⁰⁾ KUB 9.31 III 55, KUB 41.17 III 5' and KBo 13.212:2': *hu-u-*²¹⁾ Duplicate restoration is after KUB 9.31 III 56 which inserts also *ĤI.A*²²⁾ Duplicate restoration follows KUB 9.31 III 56²³⁾ KUB 41.17 III 6': ^{DUG}*GAL*²⁴⁾ KUB 9.31 III 57: ^{DUG}*hu-u-*²⁵⁾ Duplicate restoration follows KUB 9.31 III 57; KUB 41.17 III 7' omits *ZABAR*²⁶⁾ Duplicate restoration follows KUB 9.31 III 57²⁷⁾ KUB 9.31 III 58 and KUB 41.17 III 8': *ta-*²⁸⁾ KUB 9.31 III 58 and KUB 41.17 III 8': *pé-en-ni-*²⁹⁾ KBo 13.212:5' omits *-ja*³⁰⁾ Duplicate restoration is after KUB 9.31 III 59.

10. Bo 9615 + Bo 8752 + KUB 41.2 + KBo 52.27

CTH 402(G) "Rituel de Malli, contre la sorcellerie"

Bo 9615 directly joins other unpublished fragment Bo 8752 and KUB 41.2 (NS) and was glued to them during my work on the Bo 9000-fragments. For a sketch see KBo 52.27 where Bo 8752 is erroneously written Bo "8725".



Bo 9615.



Bo 8752 (top left) + Bo 9615 (top right) + KUB 41.2 (KBo 52.27 is not included).

Obv. I

- § 1' 1' [*U(M-MA fA-al-li-i MUNUS)*¹⁾] ^{URU}*Ar-za-u-ua*²⁾ *ma-a-an* [(UN-*aš*³⁾) U] *ḥ*₇-*an-za*⁴⁾ *na-an kiš-an*⁵⁾
- 2' [(*a-ni-ja-mi* V ALAM)⁶⁾] IM ŠÀ-BA II LÚ⁷⁾ *nu* ^{KU}[(*š*⁸⁾ *kur-šu-u*)] *kaṣ-pa-an ḥar-kán-zi*
- 3' [(*na-aš-ta an-da* EME)⁹⁾]. *LM* EŠ¹⁰⁾ *ki-an-ta-ri*¹¹⁾ []

(§§ 2'-4' lines 4'-11' read as copied in KUB 41.2)

Text critical notes

¹⁾ Restoration after KBo 11.12 I 1 ²⁾ Duplicate KBo 11.12 I 1: ^{URU}*Ar-za-ui*³⁾ Restoration follows KBo 12.126 I 1 and KBo 11.12 I 1; duplicate KBo 11.12 I 1: *an-tu-ua-aḥ-ḥa-aš*⁴⁾ Duplicate KBo 11.12 I 2: *al-ua-an-za-aḥ-ḥa-an-za*⁵⁾ Duplicate KBo 11.12 I 2: *ki-iš-ša-an*⁶⁾ Restoration after KBo 11.12 I 2-3 ⁷⁾ Duplicate KBo 11.12 I 3: LÚ.MEŠ ⁸⁾ Restoration follows IBoT 2.123 obv. 2'; duplicates KBo 12.126 I 2: ^{KUŠ}[*kur*]-*ša*-[*aš*] and KBo 11.12 I 3: *kur-šu-uš*⁹⁾ Restoration after KBo 11.12 I 4 ¹⁰⁾ Duplicates KBo 11.12 I 4: EME.ḪI.A and IBoT 2.123 obv. 3': [E]ME.ḪI.A ¹¹⁾ IBoT 2.123 obv. 3': *ki-ja-an-ta-[ri]*.

11. Bo 9708

CTH 419.(G) "Rituel de substitution royale"

Lines 1'-6' are duplicate to KUB 24.5 + KUB 9.13 obv. 31'-35', rev. 1-2 (CTH 419.A; LNS) and KUB 36.93 rev. 1'-7' (CTH 419.C; NS) from where the restorations are taken. My early suggestion that if Bo 9708 (NS) and KBo 15.14 (CTH 419.E; NS) were pieces of the same tablet, then KBo 15.14:1'-5' may follow Bo 9708:2'-6' after a brief gap of ca. 2-3 signs, has been not fully confirmed after a physical examination of both fragments by İsmet Aykut.



Bo 9708.

One sided

Obverse?

- § 1' 1' (*ši-pa-an-t*)*i*
-
- § 2' 2' (^dUTU A)]N-E E[(N-YA)
- 3' (*i-ši-ja-aḥ-t*)*a nu-ua* [
- 4'] *a-pu-u-u*[*š*²⁾(-)¹⁾
- 5' ^dUT(U ^{URU}*A-ri-in-n*)*a ú-u[(a-an-na)*
- 6' (*A-N*)*A* ^dLE] [(REŠ.KI.GAL)
- (broken off)

Text critical notes

¹⁾ Thus, revise the restoration [ku-u-uš] once suggested by H.M. Kümmel, *StBoT* 3 (1967) 10 for KUB 24.5 + KUB 9.13 obv. 34'.

12. Bo 9665

CTH 490(1.A.6) "Rituel de contre-magie"

This piece represents the top of a tablet including the upper edge. The text belongs to the ritual now labeled "Ritual of Ašdu". Bo 9665 (NS) lines 2-4 are duplicate to KUB 7.33+ obv. 2-6 (CTH 490.1.A.3; NS), KUB 60.159(+) obv. 1-3 (CTH 490.1.A.2; NS) and IBoT 4.27 obv. 1-5 (CTH 490.1.A.4; NS) from where the restorations are taken.



Bo 9665.

One sided

Left column (Obv. I)

§ 1 1 [UM-MA fA-aš-d(u^{MUNUS}ŠU.GI^{URU} Hur-l)a-aš]¹⁾

2 [(ma)-a-an al-(ya-an-za-aḫ-ḫa-an-da-an UN-an EG)]IR-pa SIG₅-aḫ-mi

3 [(na-an-kán ták-na-za²⁾ da-aḫ-ḫi nu ki-i)] Lda-a] ḫ-ḫi

§ 2 4 [(I DÀRA.MAŠ I GU₄ I UDU I TI^{oMUSÉN} I SUR₄.DÙ.A^{MUSÉN} I A)] L R-NA-B] U
(broken off)

Text critical notes

¹⁾ It is difficult to decide if this line is indeed inscribed as the first line of the ritual that I reconstruct here following the line order in IBoT 4.27 obv. 1-3. Otherwise, the line with SIGfi-aḫ-mi would have been extremely long for an introductory line. ²⁾ IBoT 4.27 obv. 3: [tá]k-na-az.

13. Bo 9722

CTH 616(.28.T.2) “AN.TAḪ.ŠUM^{ar}. 29^e jour: pour Ea et son groupe”

Bo 9722, a tiny fragment written in NS, right column lines 1’-8’ duplicate KBo 30.69 III 16’-21’ (NS).



Bo 9722.

One sided; left column has only one illegible sign.

Right column

- § 1’ 1’ 𐎶𐎵𐎶𐎶 [(n-zi) GA(L^{LÚ.MEŠ} MUḪALDIM-ma)]
 2’ GU₄-a[(š še-e-ša-an ti-an-zi)]
 3’ ma-aḫ-[ḫa-(an-ma-kán¹⁾ TU₃.ḪI.A)]
 4’ ta-r[(u-up-da-ri) GA(L^{LÚ.MEŠ} MUḪALDIM)]
 5’ ^{GIŠ}ḫa-a[(p-ša-al-li da-an-zi)]
 6’ na-aš-t[(a^{LÚ.MEŠ} MUḪALDIM)]
 7’ ta-ga-a[(n-zi-pu¹-uš)]
 8’ 𐎶𐎶𐎶𐎶 [(a²-an-zi)]
 (broken off)

Text critical notes

- ¹⁾ KBo 30.69 III 18’: [G]IM-an-ma-kán.

14. Bo 9716

CTH 635(.14.B) “Fragments de fêtes de Zippalanda et du mont Daha”

Bo 9716, a small fragment inscribed in NS, is a duplicate of KUB 41.41 V² 11’-17’ (CTH 635.14.A; LNS).



Bo 9716.

One sided

- § 1' 1'] 𐎶𐎶 [
- 2' [(KÁ.GAL-aš a)]n-da 𐎶a-ra-an𐎶 -[(zi)]
- 3' [(^{LÚ}A)]LAN.ZU· a-ḫa-a ḫal-za-a-[(i)]
- 4' [(^{LÚ}ki-i-t)]a-aš-ša¹⁾ ḫal-za-a-i [
-
- § 2' 5' [(LUGAL-uš-kán K)]Á É MUNUS.LUGAL ^{URU}Ka-[(ta-pí)]
- 6' [(ḫa-an-da-a-i)]z-zi ^{GIŠ}BANŠUR-uš²⁾-š[(a)]
- 7' [(ka-ru-ú a)]r-ta [
- 8' [(na-at-kán I)]Š-TU TÚG³⁾ ZA.GÌN ka⁴⁾-ri-ī[(a-an)]
- 9' [(še-er-ra-aš-ša-an 1 NINDA.ÉRIN.MEŠ)] 𐎶ki-i𐎶 t-ta-r[(i)]
- 10' [(nu-uš-ša-an še-er tal⁵⁾)-l(a⁶⁾ GU)] 𐎶ŠK𐎶 [(N ŠA DINGIR-LIM)
(broken off)

Text critical notes

¹⁾ Dupl. KUB 41.41 V² 12' omits -ša ²⁾ Dupl. V² 14' omits -uš ³⁾ Dupl. V² 15' omits TÚG ⁴⁾ Dupl. V² 15' adds -a-.

15. Bo 9662

CTH 645(.8) “Fragments de fêtes aux divinités de la terre”

Bo 9662 lines 1'-8' (NS) are duplicate or parallel to KUB 58.38 I 18'-25' (NS). This fragment includes a listing of deities similar to KUB 43.30 III 5'-8' (OS), KBo 11.32 obv. 31-33 (NS) and KUB 58.38 I 11'-13', 23'-25'.



Bo 9662.

One sided

- § 1' 1' [DUMU.MEŠ.É.G] 𐎶A𐎶 L [
- 2' [LUGAL-uš Q]A-TAM q[a-a-i
- 3']-ḫ la-ḫ [u-²⁾an-zi¹⁾
-
- § 2' 4' [ne-p]í-ša-aš ^d[U-aš kat-ti-iš-ši-ma]
- 5' [an-na-a]š da-g[a-a-an-zi-pa-aš ^dUTU-uš]
- 6' [kat-t]i-iš-ši-ma ^d[Me-ez-zu-ul-la-aš]
- 7' [^dŠ]u-²⁾li-ī[a-az kat-ti-iš-ši-ma ^dḪal-ki-iš]
- 8' [^dŠIN-aš] 𐎶kat-ti𐎶 -[iš-ši-ma ^dIš-pa-an-za-še-pa-aš]
(broken off)

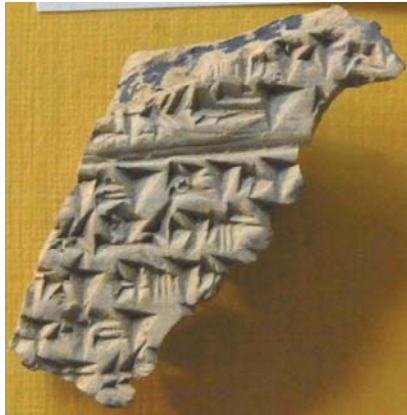
Text critical notes

¹⁾ For lines 1'-3' see KUB 58.38 I 18'-21': ... DUMU.MEŠ.É.GAL IV ^{DUG}KU-KU-UB^{HLA} AN.BAR / [a]-ap-pa-an-zi LUGAL-uš-kán QA-TAM da-a-i / [...]x-TIM EGIR ^{GIŠ}ŠEN ke-e-da-aš / [... la-a'-h]u'-an-zi.

16. Bo 9679 + KUB 10.72

CTH 669(.4.A) "Grands fragments de fêtes"

Bo 9679 lines 1-7 directly join KUB 10.72 V 1-7 (NS). The lines of Bo 9679 are close to the left column divider, so that nothing is missing at the beginning of line 6. The main text KUB 10.72 has been recently studied by F. Fuscagni, *SMEA* 52 (2010) 137-147; the additional piece presented here makes some slight additions and corrections to his transliteration for KUB 10.72 V 2-5 on pp. 139-140.



Bo 9679.



Image processing of the join Bo 9679 + KUB 10.72.

Rev. V

§ 1 1] 𒀭.DINGIR-LIM-K[A p]i-ra-an QA-TAM-MA
2 [İR-KA¹⁾] 𒀭-eš-du 𒄩²⁾ -ḫa-aš-sar-u-e-eš-du

§ 2 3 [Í]D²⁾<.MEŠ²⁾>-ma GIM-an ar-ša-an-zi
4 [z]i-ik-ka₄-ká[n] DINGIR-LUM EN-YA
5 A-NA É.DING 𒄩IR -LIM-KA EGIR-pa an-da-an
6 QA-TAM-MA ar-ši-ja-aḫ-ḫu-ut
7 [n] 𒄩u-za 𒄩u-el É.DINGIR-LIM-KA ZAG.GAR.RA-ja

...

(Bo 9679 breaks off here)

Text critical notes

¹⁾ Here is space for a maximum of two signs; for free restoration with *İR-KA* cf. the context of KUB 10.72 V 9-11.

Translation

The translation of these passages now reads as follows:

(§ 1) [...] Let him be likewise [your servant] in [f]ront of yo[ur] temple, let him act in a lordly manner.

(§ 2) As the [r]iver<s> flow, O god my lord, likewise let [y]ourself flow back into your temple (and care for your temple and altar again).

17. Bo 9632

CTH 736(.9) “Paroles de la Zintuhi dans le temple du Soleil (en partie bilingue)”

Bo 9632 (NS or LNS), a piece of the right-bottom part of the tablet, belongs to the well-known Hattian-Hittite bilingual text. It contains the Hittite portions only: obv. II² 5'-6' are duplicate or parallel to KBo 37.48(+)KUB 28.8 obv. rt. col. 1'-3' (NS) and KBo 17.22 III 4' (OS) from where the restorations are taken; rev. III² 1-5 are analogous to KBo 37.48(+)KUB 28.8 obv. rt. col. 4'-8' and KBo 17.22 III 5'-9'.



Bo 9632 obv. II².



Bo 9632 rev. III².

Obv. II[?]

§ 1' 1' (traces)

§ 2' 2']- Γ_{un}[?]Γ¹⁾
 3']- Γ_{ur}[?]Γ[?]-tē-pu-uš²⁾
 4']-x̄ K̄AR-at³⁾
 5' -i]a LUGAL-un MUNUS.LUGAL-na
 6' KUR-e-īa-a(n-ti ḫu-u-ma-an)-t]i LUGAL.MEŠ⁴⁾ DÙ-at⁵⁾

(bottom of the tablet)

Rev. III[?]

§ 1 1]-x̄ KUR-[...[?]]-x̄[?]-x̄ iš-x̄-[...]
 2 d]a[?]-a-šū-eš x̄-x̄-x̄(-)[...[?]]
 3 d]a-a-aš nu la-ba-ar- [na] -[a]š[?]
 4]-x̄ da-a-lu-ga-aš
 5] [q-ša] -an-du
 6 (traces)
 (broken off)

Text critical notes

¹⁾ To be restored [LUGAL]- Γ_{un}Γ like in II 4'; cf. the possible Hattian counterpart *ka-a-at-ti* in KBo 37.49 rev. 11'. ²⁾ Cf. the possible Hattian counterpart *ḫu-u-ur-te-pu-uš* (= *wu_{ur}-te-pu-š*) in KBo 37.49 rev. 12'. ³⁾ This is the (L)NH spelling of *wemiyat* "found; arrived"; this could be the Hittite translation of the Hattian verbal form *tu-ut-ḫe-el* (= *tu-t-ḫel*) in KBo 37.49 rev. 12'. ⁴⁾ Cf. the possible Hattian counterpart [*ḫu-u-u(?)*]-ru-un *te-ḫa-ka-at-ti* (= *wu_{ur}-un te-wa_a-katti*) in KBo 37.49 rev. 13'. ⁵⁾ This is the (L)NH spelling of *iyat* "made"; this seems to be the Hittite translation of the Hattian verbal form *tu-u-ḫa-aq-[pu]* (= *tu-wa_a-pu*) in KBo 37.49 rev. 12'. Other versions KBo 37.48(+)KUB 28.8 obv. r. col. 3' and KBo 17.22 III 4' have the older spelling *i-e-et* instead.

18) Bo 9647 + KUB 35.13

CTH 763 “Fragments de rituels hittites contenant des louvismes”

Bo 9647 (NS) lines 2’-6’ directly join KUB 35.13:6’-10’.



Bo 9647.



Image processing of the join Bo 9647 + KUB 35.13

One sided

§ 1’ 5’ (= 1’) (traces)

6’ (= 2’) [...[?] EGI] 𐎶𐎵𐎶𐎶 -*an-da* [X] 𐎶𐎶^{GI} 𐎶GAG.𐎶I.A ZABAR XX^{GI} 𐎶GAG.𐎶I.A

7’ (= 3’) [...[?] XXX[?] 1) ^{GI} 𐎶GAG.𐎶I.A [G] 𐎶IŠ-*ru-ya-aš da-a-i* [

8’ (= 4’) [...[?] *nu-uš-ma-aš i-da-la-a-mu-uš na-ak-k[i-uš ...[?]*

9’ (= 5’) [...[?] *kat-ta tar-ma-a-iz*] -zi^{MUNUS} 𐎶ŠU.GI *lu- lu*] -[*i-li*]

10’ (= 6’) 2) *k[i-i] š-ša-an* 𐎶𐎶 <me>³⁾ -*ma-i*

§ 2’ 11’ (= 7’)] 𐎶 *x-x-x-x* 𐎶 []-*x a-ša-an-d[u*

(broken off)

Text critical notes

¹⁾ The number consists of three *winkelhakens*, thus “XXX”, differently from “XX” in KUB 35.13:6’ ²⁾ It seems no other word is written in this lacuna. ³⁾ Immediately following an erasure, the sign “me” has apparently been erased, or dropped out by accident.

NEW HITTITE HIEROGLYPHIC SEALS FROM THE PLAIN OF ANTIOCH IN THE HATAY MUSEUM

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Introduction

During the preparations of the publication of the stelae of Arsuz (Iskenderun), which had been transferred from their original find spot in the grounds of the Naval Base to the garden of the Archaeological Museum of Hatay, we determined that some new hieroglyphic Hittite seals¹ had been acquired by the museum since our last publication of the collections stored in the same museum in the year 1983 (Dinçol 1983). The following study, which is complementary to the above-mentioned article, is dedicated to our dear colleague and friend Professor Aslıhan Yener at the Koç University.

1. INVENTORY NUMBER 4811

Photo 1a, 1b; Fig. 1a, 1b.

Diameter: 1.95 cm. Thickness: 0.9 cm.

Description: Biconvex button seal of buff colored stone, rim without grooves, perforated through the axis. One side inscribed with hieroglyphs, the other bears ornaments or symbols.

Side A: The hieroglyphic signs representing the name of the seal owner are placed on the perpendicular axis of the seal as follows: L.447-L.439-L.80. On the vocalization of the first sign there is a discussion in the recent studies (Dinçol-Dinçol 2008: No. 249, 250, 251; Hawkins 2000: 33, 104) whether it should be *a* or *i*. Thus, the name can be read as *na₅/ni_x-wa/i-SARMA* (*Na/i-wa/i-Šarruma*). On the right side there are the signs L.370 (BONUS₂) over L.386 (VIR₂), on the left the sign for SCRIBA (L.326) is also placed under L.370 (BONUS₂).

Side B: This side bears unidentifiable remains of symbols or ornaments.

The seal dates to the 13th century BC.

* During the editing of this volume the sad news reached us that Professor Ali Dinçol had passed away. *Anatolica* will remember him as an esteemed author and colleague.

¹ We are very thankful for the collaboration of the former Director of the Museum Faruk Kılınc, and the museum assistants Demet Kara and Ömer Çelik.

2. INVENTORY NUMBER 4994

Photo 2a, 2b; Fig. 2a, 2b.

Find Spot: Surface find from Tell Judaidah.

Diameter: 2.15 cm. Thickness: 1.05 cm.

Description: Biconvex button seal of black-gray colored stone, perforated through the axis. Both sides inscribed.

Side A: The hieroglyphs of the name are placed on the perpendicular axis of the seal as follows: L.376+L.383-L.176-L.35 which can be read as *za/i+ra/i-la-na*. This name is hitherto not attested. On both sides of the name there are probably badly drawn and partly damaged figures of pithoi, which reflect the title of the seal owner (PITHOS). This title is frequently encountered in Hittite glyptics (Hawkins *apud* Herbordt 2005: 305ff.; Dinçol-Dinçol 2008: 70f.).

Side B: The hieroglyphs of the name consist of L.334-L.14-L.35, which can be read as *pa-para/i-na*. Although the name is not attested as yet, a similar name *Papparzina* exists (NH 934). On the left side of the name there are unidentifiable traces which could be interpreted as L.376, in which case the name could also be read as *Papparzina*.

The seal dates to the end of the 13th century BC.

3. INVENTORY NUMBER 7976

Photo 3; Fig. 3.

Height: 2.1 cm. Diameter of the Bulla: 1.9 cm. Diameter of the Impression: 1.6 cm.

Diameter of the Central Field: 0.7 cm.

Description: Conical clay bulla, perforated point broken off, impression flat.

The flat clay impression, most probably originating from a metallic tripod or a flat sided stone disc, displays a rim decorated by a chain of alternating triangles and floral motives with three leaves around the rather small central area with hieroglyphic signs. The name of the seal owner is reflected by the signs L.19-L.110-L.215-L.461/462. These signs give the name *a-ma-ha-pá?*. The value of the last sign is discussed by several authors and is not yet certain (Dinçol-Dinçol 2008: 24; Hawkins 2000: 36-37). It is also possible that this sign could be interpreted as a title.

This seal can be dated to the 13th century BC.

4. INVENTORY NUMBER 8438

Photo 4.

Find Spot: Surface find from Tell Atchana.

Height: 2.5 cm. Diameter of the Bulla: max. 3 cm. Diameter of the Impression: 2.4 cm.

Diameter of the Central Field: 0.7 cm. Width of the Inner Frame: 0.3 cm.

Width of the Outer Frame: 0.4 cm.

Description: Conical clay bulla, perforated point broken off, impression flat.

The central field, which bears hieroglyphs of the seal owner's name, is rather small and is encircled with two frames. The inner frame is decorated with a spiral band and the outer one shows an elaborately made zigzag band. Unfortunately there are only illegible remains of signs.

It can be dated to the last quarter of the 16th century.

5. INVENTORY NUMBER 9495

Photo 5a, 5b; Fig. 5a, 5b.

Diameter: 1.9 cm. Thickness: 1.2 cm.

Description: Biconvex button seal of black stone, rim profiled with two grooves, perforated through the axis. Both sides inscribed.

Side A: On the rather erased surface of this side the following signs of the name can be detected on the perpendicular axis. The first sign can possibly be interpreted as L.29 and the following one as L.439. Thus the name can be read as *Tawa/i*. On the left edge the signs BONUS₂.VIR₂ can be seen.

Side B: This side contains most probably the same name and symbols, but they are more difficult to decipher than the former.

The seal dates to the second half of the 13th century BC.

6. INVENTORY NUMBER 15763

Photo 6a, 6b; Fig. 6a, 6b.

Diameter: 1.35 cm. Thickness: 1.1 cm.

Description: Biconvex button seal of light colored limestone, rim profiled with two grooves, perforated through the axis. Both sides inscribed. The sealing surfaces have scale patterned frames.

Side A: The uppermost sign must only be a symbol (a badly drawn VITA?). The hieroglyphs of the name are placed on the perpendicular axis in the following order: L.322/323-L.215-L.334 (PURUS-*he-pa*=*Kummiya-Hepa*). The initial sign PURUS is read *šuppi-* in Hittite and *kumma-/kummi-* in cuneiform Luwian (for the discussions see: Boehmer-Güterbock 1987: Nr. 215; Hawkins *apud* Herbordt 2005: 299, 435; Hawkins 2011: 101). Although this name has not been encountered hitherto, personal names like ^f*Kummiya*, *Kummiyaziti/Kummayaziti* are documented both in cuneiform and hieroglyphic sources (NH 623, 621; Boehmer-Güterbock 1987: Nr. 215; Herbordt 2005: Nr. 174, 175; Dinçol-Dinçol 2008: Kat. 141, 271). The signs BONUS₂.FEMINA are placed on both sides of the name.

Side B: The composition of the hieroglyphs of this side is identical with the former, except the uppermost symbols. On both sides there is a small circle on the left of the hieroglyphs of the name.

The seal dates to the 13th century BC.

7. INVENTORY NUMBER 15964

Photo 7a, 7b; Fig. 7a, 7b.

Diameter: 2.15 cm. Thickness: 1.2 cm.

Description: Biconvex button seal of black stone, partly damaged, rim profiled with two superficial grooves, perforated through the axis. Both sides inscribed.

Side A: The hieroglyphic signs of the name of the seal owner are placed on the perpendicular axis in the following order: L.445-L.178-L41-L19 (*la/i/u-la+ra+a-tà-á*). This should be read because of the sign L.19 put at the end as *Ala(/i/u)larata*. The name is flanked on both sides with the sign L.289 (AURIGA). At the utmost right edge near the title there is also the sign L.386 (VIR₂). Between the last sign and the title on the left edge a decorative element, possibly stylized vegetation, can be seen.

Side B: On this side the hieroglyphs of the name are placed in the same order as on the former side. The sign VIR₂ is put near the title on the left side. Here one can see the same floral symbol and another decorative element at the bottom. On the right side there is the sign L.370 (BONUS₂), the title under it is broken off. We are not able to explain the existence of the three vertical strokes in the sign L.19.

The seal can be dated to the second half of the 13th century BC.

8. INVENTORY NUMBER 16762

Photo 8a, 8b; Fig. 8a, 8b.

Diameter: 3.5 cm. Thickness: 1.7 cm.

Description: Biconvex button seal of brilliant black stone, rim profiled with two grooves, perforated through the axis. Both sides inscribed.

Side A: The sealing surface which bears the hieroglyphic signs is encircled by a simple line. The signs are placed from top to bottom on the perpendicular axis of which the third one represents the full body of a mule (L.100). To our knowledge this is the first representation of L.100 with its full body. Therefore it is plausible to transcribe this sign as ASINUS₃. This figure which covers almost the half of the sealing surface is the first element of the personal name. Over the back of the animal's figure and under its belly are placed the other signs in the following order: L.41-L175-L.450. Thus the name should be transcribed as ASINUS₃-tā-la-a and read *Tarkašnatala*. On both ends of the mule the signs L.326 (SCRIBA) reflect the title of the seal owner.

Side B: The composition of the signs on this side seems to be almost identical with the former side except an extra sign L.326 (SCRIBA) put at the bottom of the surface. On the other hand, on this side the insides of hieroglyphs are badly damaged.

At Boğazköy a different seal impression from this scribe was found suggesting that this person had used more than one seals (Herbordt 2005: Nr. 425).

The seal dates to the 13th century BC.

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Photo 1a.



Photo 1b.



Fig. 1a.



Fig. 1b.



Photo 2a.



Photo 2b.



Fig. 2a.



Fig. 2b.



Photo 3.



Fig. 3.



Photo 4.



Photo 5a.



Photo 5b.



Fig. 5a.



Fig. 5b.



Photo 6a.



Photo 6b.



Fig. 6a.



Fig. 6b.



Photo 7a.



Photo 7b.



Fig. 7a.



Fig. 7b.



Photo 8a.



Photo 8b.

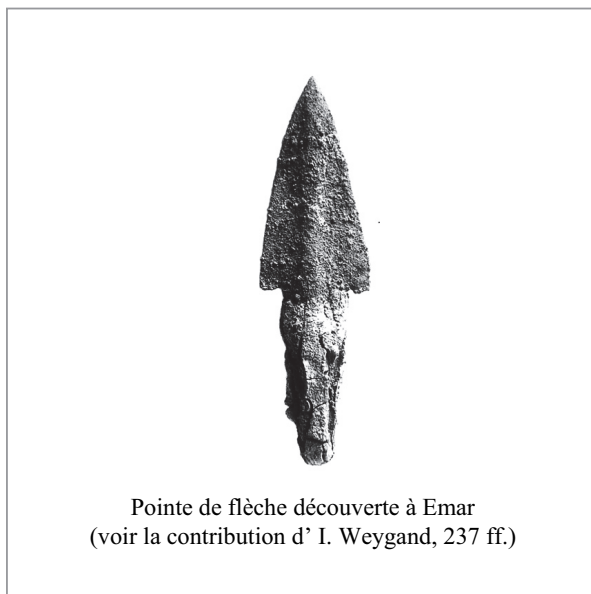


Fig. 8a.



Fig. 8b.

**« QUESTIONS METALLURGIQUES ». Un séminaire interdisciplinaire
UMR 7044, CNRS Strasbourg (MISHA) – 2009-2012**



Dans le cadre du programme « Questions métallurgiques en milieu anatolien et syro-hittite » de l'UMR 7044 de Strasbourg, programme précédemment dirigé par Dominique Beyer et Isabelle Weygand et actuellement sous ma responsabilité et celle d'Isabelle Weygand, j'ai eu l'idée d'organiser un séminaire interdisciplinaire de recherche me permettant, en toute souplesse, d'inviter différents chercheurs ayant eu l'occasion de s'intéresser aux pratiques métallurgiques de l'Anatolie et de la Syrie anciennes. J'ai en outre souhaité élargir l'horizon de ce programme en faisant intervenir des spécialistes d'autres régions du Bassin Méditerranéen. Ainsi, neuf intervenants ont apporté leurs lumières sur différents aspects de la métallurgie dans le Bassin Méditerranéen ancien : entre archéologie, philologie et histoire des techniques, chacun d'entre eux a posé ses propres « questions métallurgiques ». Dans ce premier volet, trois articles traitent de la métallurgie dans le cadre de la philologie hittite (S. Vanséveren et A. Mouton) et de l'archéologie syrienne (I. Weygand).

Alice Mouton

NOMS DE MÉTAUX DANS LES TEXTES HITTITES

Sylvie Vanséveren¹

Abstract

This paper deals with the words pertaining to the names of metals in the Hittite texts. It aims at looking over the different words used in Hittite, from the semantic, morphological and etymological point of views, as well as concerning loanwords from different languages (Indo-European Luwian, or non Indo-European Hattian, Hurrian, Akkadian, Sumerian).

INTRODUCTION

L'objectif de cette contribution est de brosser un tableau général des termes eux-mêmes, du point de vue linguistique². Les textes hittites mentionnent divers métaux: fer, étain, cuivre, argent, or, plomb, bronze. Le choix de l'ordre dans lequel ils sont repris – qui n'est pas l'ordre habituel du métal le plus précieux au métal le moins précieux (ordre qui d'ailleurs ne reflète pas forcément l'échelle de valeur propre aux civilisations concernées) – est dicté par des considérations dues à la fois à la documentation et aux études modernes. Ainsi, le nom du fer et de l'étain se trouvent faire l'objet de nombreuses discussions à partir d'un même texte et il m'a donc semblé opportun de traiter ces deux métaux à la suite l'un de l'autre. J'ai également tenté, dans la mesure du possible, de traiter les différentes dénominations en fonction du type d'explication qu'elles reçoivent – emprunt ou formation d'origine indo-européenne.

Le hittite s'inscrit dans deux tendances caractéristiques des langues indo-européennes en général. Premièrement, peu de noms de métaux peuvent être ramenés à un vocabulaire proto-indo-européen³: ceci vaut pour le hittite comme pour d'autres langues. Deuxièmement, le hittite semble confirmer l'utilisation de noms de couleurs ou de nuances (sombre, clair, brillant) pour nommer des métaux. Pour les langues indo-européennes, on peut ainsi reconstruire un nom général **h₂eyes-* «cuivre, bronze», qui a donné diverses dénominations: lat. *aes* «cuivre, bronze», sk. *áyas-* «cuivre; (puis) fer», av. *ayah-* «métal, bronze». D'autres noms reposent sur des noms de couleur/nuance:

¹ F.R.S. – ULB.

² Sur le lexique: Berman 1972; Weeks 1985 [2006]; pour les noms de métaux en akkadien, cf. les articles du *Reallexikon der Assyriologie*; Dercksen 2005; les aspects utilitaires, symboliques et les échelles de valeurs sont traités pour le domaine hittite par Siegelová 1984; Siegelová 1993; Siegelová 2005. A. Mouton m'a signalé l'ouvrage de S.Ö. Savaş 2006: *Çivi yazılı belgeler ışığında Anadolu'da (I.Ö.2.bin yılında) madençilik ve maden kullanımı*, TTKY VI/63, Ankara, que je n'ai pu consulter.

³ Voir Mallory, et Adams 2006: 241-242, et les dictionnaires étymologiques.

h₁roudho-* «(métal) rouge» qui a donné v.sl. *ruda* «mine, métal», sk. *lohá-* «cuivre», *rauði* «mine de fer rouge»; **h₂ews-/h₂wes-* «devenir clair, se lever (en parlant du jour)» (cf. ion. ῥῶς, lat. *aurōra*, sk. *uṣās* «aube, aurore») qui a donné des noms de l'or: lat. *aurum* (ausom*), v.pr. *ausis* «or» (**h₂ews-*), tokh. A *wäs*, B *yasa* (**h₂weseh₂*); **ghel(h₃)-* «jaune»: sk. *hiraṇya-*, (**gh₁h₃-en-*), got. *gulþ*, v.sl. *zalto* (**ghelh₃-t-*); **h₂erg-* «briller» pour un nom de l'argent, **h₂(e)rg-nto-*: lat. *argentum*, sk. *rajatām*. Dans tous ces cas, il peut s'agir de développements parallèles, qui ne permettent pas forcément de reconstruire un nom de métal sur le plan indo-européen. La question sera évoquée tout au long de cet exposé, au travers des noms de métaux reposant sur des formations d'origine indo-européenne, mais qui, la plupart du temps, se révèlent être des formations proprement hittites.

1. Fer⁴

sum. AN.BAR, akk. *PARZILLU*

ḥapalki- (hatt.); *aḥlipaki-* (hatt.); **ki/eklu-*, **kiklubaššar* (louv.; hourr.?)

Les données sur le nom du «fer» dans les textes hittites font intervenir d'une part des termes hattis, hourrites, akkadiens⁵ et, d'autre part, des formes d'origine indo-européenne.

Le hittite utilise le plus souvent AN.BAR.

AN.BAR = *ḥapalki-*

Le fer est mentionné dès les textes vieux hittites sous la forme AN.BAR, et, avec complément phonétique, AN.BAR-*aš* (gén. sg.)⁶. Le moyen hittite et le hittite récent utilisent AN.BAR (AN.BAR-*aš*, AN.BAR-*it*) et le terme hatt *ḥapalki-*. Ce dernier terme a suscité, et continue de susciter, de nombreuses discussions et hypothèses.

Le sens de *ḥapalki-* a été établi sur base d'un texte bilingue hatt-hittite, où Laroche a mis en évidence l'équivalence *ḥa-pal-ki-ya-an* = *ŠA* AN.BAR ou AN.BAR-*aš* (KBo 37.1; CTH 726 - vh.)⁷.

Dans les textes en akkadien, le terme se présente sous la forme *ḪABALGINNU* «métal ou alliage utilisé pour des armes» (CAD). Il est attesté dans les Lettres d'Amarna,

⁴ Par souci de clarté, tous les termes et extraits de textes en akkadien sont en capitales italiques (excepté dans les notes de bas de page qui reprennent des parties de notices du *Chicago Assyrian Dictionary*).

⁵ Voir les formes citées chez Laroche 1957; Friedrich, et Kammenhuber 1975-: s.v. *ḥapalki-*; Puhvel 1984(-): s.v. *ḥapalki-*; également Siegelová 1984: 71-168; Košak 1986: 1986, 125-135.

⁶ Voir, pour les attestations, Friedrich et Kammenhuber 1975-: s.v. *ḥapalki-*

⁷ Hitt. *ŠA* AN.BAR _{GIS}GAG.ḪI.A (II 12) = hatt. *ḥapalkiyan kurkupal* (I 13) «pieu, clou en fer»; hitt. AN.BAR-*aš* GUNNI (II 23) = hatt. *ḥapalkiyan tetekuzzan* (I 23) «foyer de fer», où *=an* est une finale d'oblique, servant à dénoter le génitif (gén. de matière): Cf. Soysal 2004: 210, 447-448, *passim*.

où il est employé à propos de lames de poignard (GÍR ŠA EME-ŠU HA-PAL-KI-IN-NU)⁸. Selon Laroche, *HABALGINNU* doit être l'équivalent de AN.BAR, car la même lettre d'Amarna mentionne ailleurs GÍR ŠA EME-ŠU AN.BAR. Il s'agirait là d'un emprunt fait au hurrite (Laroche 1957: 9-11). Il faut noter que le terme *HABALGINNU* reste assez ambigu dans les textes akkadiens: il pourrait aussi désigner une variété de fer (il est attesté dans un fragment administratif médio-assyrien, à côté de AN.BAR)⁹. *Hapalki-* se retrouve en contexte hittite: *KUB* 31.24, 4 SAG.DU UR.MAH *hapalkini* «tête de lion en fer» (fragment d'inventaire de culte). En contexte hurrite, on trouve *hapalki* et *apalki* (*KUB* 29.8 IV 13, 20).

Le terme hattî a constitué un emprunt, intégré à la langue hittite, comme en témoignent les formes fléchies: nom.-acc. n. *hapalki*, gén. *hapalkiyaš*, instr. *hapalkit*¹⁰. À côté de ces formes, on trouve encore une forme altérée de dat.-loc. *apalkiti*: *KUB* 30.40 I 5 PANI *apalkiti* «devant (la statue) de fer», qui semble reposer sur un thème élargi en *-t-*.

Les textes font encore mention de variétés possibles de fer: à côté de AN.BAR (dès le vh.), on trouve AN.BAR GE₆ «fer noir» (attesté en nh.), souvent compris comme «fer météorique», et AN.BAR SIG₅ «bon fer» (acier?). L'identification de AN.BAR GE₆ comme désignation du «fer météorique» repose essentiellement sur un passage mentionnant du fer provenant du ciel (*KBo* 4.1 I 39 AN.BAR GE₆ *nepišaš nepišaz uter* «ils apportèrent du fer noir du ciel depuis le ciel»). Dans la mesure où ce même type d'expression se retrouve avec AN.BAR seul (*KUB* 2.2 I 48 AN.BAR *nepišaz uter*; *KBo* 12.56 I 14 AN.BAR AN-E «fer du ciel»), il semble toutefois que AN.BAR comme terme générique puisse désigner à la fois le fer et le fer météorique. Il est aussi possible que AN.BAR désigne au départ le fer météorique seul, et qu'il ait été ensuite également employé pour nommer le fer (Kořak 1986: 125-126)¹¹.

La situation telle que décrite dans ces lignes paraît donc relativement simple: le hittite fait usage d'une part de sumérogramme, et, d'autre part, d'un terme emprunté au hattî, intégré à la langue (*hapalki-*), ou sous forme «hurritisée» (*hapalkini*, akk.

⁸ Voir *CAD*, sous le terme concerné (EA 22 i 32: *1 paṭru ša lišanšu ḥ[a]-b[a]l-k[i]-i-in-nu* «one dagger whose blade (is of) h.-metal»; var. *ḥa-bal-ki-nu* ibid. iii 7 (inventory of Tushratta)). Les tablettes lexicales donnent encore une équivalence *šip-pa-tu* (var. *ši-pa-tu* LTBA 2 4 iv 15) = *ḥa-bal-g[i]-(in)-nu* LTBA 2 2:284. Le *CAD* ne se prononce pas sur *šippatu* qui peut désigner un métal ou un alliage. Le sens qu'on lui attribuera dépendra de celui que l'on donnera à *HABALGINNU* et *hapalki-* dans les textes hittites.

⁹ Postgate 1973: 13-14: l. 11-12 I GÍR ša AN.BAR || 1 *ul-mu šaḥa-bal-gi-ni* «un poignard en fer, une lance en métal *ḥabalginnu*».

¹⁰ *KBo* 24.52, 6: *hapalki lipir* «ils léchèrent le fer» (Haas 2003: 221). *KUB* 16.34 I 1-2: *DU URU.KÙ.BABBAR-ti DINGIR.MEŠ hapalkiyaš* «dieu de l'orage de Hatti, dieu tutélaire de Hatti, dieux en fer/du fer»; cf. Laroche 1957: 10: «dieux en fer», allusion aux idoles de fer et à la matière, ou «dieux du fer» comme divinités patronnant le fer. L'auteur préfère cette dernière solution. Elle ne semble pas reprise par Puhvel 1984(-): s.v. «deities of iron», ni par Taggar-Cohen 2006: 294 «gods' (statues) of iron» (renvoyant à Puhvel). *HT* 38 II 12 *hapalkit šanḥir* (ou *šannir*) «ils l'ont ... avec du fer; le texte est lacunaire et ne permet de pas de décider de la forme; cf. *CHD*, s. v. *šanḥ-* (9 c): ni le verbe *šanḥ-* «chercher; nettoyer», ni *šanna-* «cacher, couvrir» ne conviennent au contexte, où il est question d'un foyer placé par les dieux.

¹¹ Sur l'emploi de AN.BAR GE₆ et *PARZILLU* comme désignations du fer météorique, cf. encore Valério et Yakubovich 2010. *PARZILLU* serait, selon cette analyse, un emprunt fait au louvite *parza-*, **parzil(i)-*.

ḪABALGINNU). Le nom du fer est de façon générale qualifié de «terme culturel» anatolien, attesté dans les différentes langues de l'Anatolie, sans que l'on puisse établir son origine précise. Puhvel (1984-: s. v.) songe à un rapport – parenté ou emprunt – avec le gr. *χάλυψ, χάλυβος* «acier»¹² (que l'on retrouve mentionné également à propos de **ke/iklu-, kikluba-*).

Plusieurs éléments viennent toutefois perturber ce tableau: tout d'abord, l'existence d'un troisième terme, *e/aḫlipak(k)i-*, dont le sens et la forme restent discutés. Hitt. *e/aḫlipak(k)i-* est selon toute probabilité un emprunt fait à l'akkadien (via intermédiaire hourrite) *EHLIPAKKU-*, qui désigne un type de pierre¹³. Attesté dans des inventaires, il est donné comme adjectif qualifiant une pierre par Košak «(ornamented with) *eḫlipaki*-stones; coloured like e.-stones» (trad. Košak 1982: 210); *e/aḫlipaki*-pourrait ainsi désigner une sorte de pierre précieuse (*IBoT* 1.31 I 10-11: 2 ^{TUG} *ḫazarti* 1 ^{TUG} *ZA.GÎN* 1 ^{GAD} *eḫlipaki* *KEŠDA-ma* *SAL.LUGAL anda dāiš* «1 yellow garment, 1 blue, while the queen put in 1 garment in the colour of *eḫlipakki*-stone, with knots» (trad. Košak 1982: 6); *KUB* 42.75, 3: 1 *peran pedumaš eḫlipakkiyaš* «1 implement for carrying forward, of *eḫlipakki*-stone» (trad. Košak 1982: 189). Si cette valeur est assez généralement acceptée, elle a cependant été remise en cause par E. Neu, qui y voit plutôt une forme à métathèse de *ḫapalki-*: *peran pedumaš aḫlipakkiyaš* désignerait ainsi un «plateau en fer». L'hypothèse trouverait notamment des appuis dans des parallèles, où *peran pedumaš* est suivi de désignations de métaux: *peran pedumaš* *GUŠKIN*, *AN.BAR GE₆*, *AN.BAR GE₆ GUŠKIN*. Il faut immédiatement ajouter que *peran pedumaš* est également suivi de noms de pierre (*peran pedumaš ŠA NA₄*), ou d'autres matières (ivoire: *peran pedumaš ZU₉ AM.SI SA₅*), ce qui affaiblit considérablement l'hypothèse. La forme reste par ailleurs difficile à expliquer dans un rapport éventuel avec *ḫapalki-*. Si l'on songe effectivement à un phénomène de métathèse, il paraît toutefois plus complexe que celui avancé dans des termes comme akk. *AŠIPU*: hitt. *apiši-*, akk. *GURPISU*: hitt. *gurzipant-* (et *kurpiši-*)¹⁴. Le *CHD* retient *eḫlipakki-* comme la désignation d'une pierre précieuse et non d'un métal comme le fer.

AN.BAR = **ke/iklu-*, **kiklubaššar-*

Ensuite, un quatrième terme intervient dans la question du nom du «fer» en hittite, qui cette fois concerne le domaine des langues indo-européennes. En effet, à côté d'un terme d'origine hattie comme *ḫapalki-*, une dénomination d'origine indo-européenne a été posée à partir de **ke/iklu-* «fer» (Melchert 1983: 139-141 sur base de l'analyse de Laroche 1968: 777). L'identification d'un autre terme pour le fer pourrait avoir une

¹² Le terme grec reste sans explication, cf. Chantraine 1968-: s. v. Frisk 1960: s.v. évoque un possible rapprochement entre *ḫapalki-* et *χαλκός* (cf. Beekes 2010: s. v. également).

¹³ Cf. *CAD*, s. v. *eḫlipakku* (*eḫlupakku*, *ḫilipakku*): *NA₄.MEŠ eḫ-lu-pa-ak-ku*; *NA₄ ḫi-[li]-pa-ak-ku*.

¹⁴ Voir notamment Puhvel 1984(-): s.v. *ḫapalki-*, à l'appui de l'hypothèse de E. Neu et sous les termes concernés. L'auteur souligne par ailleurs que la forme hittite *apiši-* a pu être favorisée par un autre terme akkadien, *EPIŠU* désignant le «sorcier». L'akk. *GURPISU* semble, de son côté, déjà connaître des formes à métathèse en akkadien même (*GURSIPU*) et est donné comme terme étranger par le *CAD*.

incidence sur le sens donné à *hapalki*- (cf. Reiter 1997: 392-400), mais les faits restent extrêmement complexes et délicats à interpréter.

Le terme est tiré d'un composé *kiklubašsar[iš-m]a-aš*, attesté dans RS 25.421 (CTH 315, cf. Laroche 1968: 773-779; Haas 2006: 282-283), traduit sur base de l'équivalent akk. *UNQI PARZILLI* «anneau de fer». Le terme serait à décomposer en *kiklu*- + *baššari*-, avec un second membre correspondant à *paššari*- «circoncis» (attesté dans un texte médical, KUB 44.61). L'équivalence entre hitt. *kiklu*- = akk. *PARZILLU* «fer» et hitt. *b/paššari*- = akk. *UNQU* «anneau»¹⁵ permettrait de poser un autre nom du «fer» en hittite. Ce terme **kiklu*- serait encore attesté dans le louvite *kiklimaima/i*-¹⁶, compris comme le participe **kiklumaima/i*- d'un verbe **kiklimāi-/kiklumāi*- «(re)couvert de fer» («iron-coated», Melchert 1993: s. v.). S'interrogeant sur l'origine d'un tel terme, Melchert (1983) propose d'y voir un dérivé à redoublement et fait référence à d'autres termes de couleur, comme gr. *κελαινός* «sombre», *κίλλός* «gris». L'un des points intéressants de cette hypothèse est de mettre en relation le nom du métal et celui d'une couleur. Sur base de ces données, Reiter (1997: 394) a avancé les correspondances suivantes pour le hittite, en posant une distinction de couleur entre de possibles variétés de fer: AN.BAR = **ke/iklu*- «fer (métal gris)», AN.BAR GE₆ = *hapalki*- «magnétite (fer noir)». Toutefois, cette hypothèse ne va pas sans problèmes; d'une part, elle repose sur le postulat d'une distinction effective entre AN.BAR et AN.BAR GE₆ (qui n'est pas évidente, cf. *supra*) et, d'autre part, elle dépend de la restitution de **ke/iklu*-, qui a précisément été remise en cause.

La première difficulté concerne l'étymologie de **ke/iklu*-. La comparaison avec gr. *κελαινός* et *κίλλός* n'est pas évidente, car les deux termes restent isolés et sans explications¹⁷.

Ensuite, l'existence d'un **kiklu*- «fer» est loin d'être assurée et admise: elle dépend notamment de l'interprétation du passage en question (RS 25.421, 21-22).

Starke¹⁸ souligne avec raison que la traduction se fonde d'abord sur le texte akkadien, dont le sens est plus directement perceptible. Mais la deuxième partie du texte hittite, elliptique, ne donnerait pas le nom de l'anneau [Siegelring]:

hitt. *da-an-ku-li-iš-ma-aš ar-ši-i[š]* || *ki-ik-lu-ba-aš-ša-ri-i[š-m]a-aš*

«Sie (= meine Mutter) (ist) ein zinnerner Ring, sie (ist) ein eiserner [Siegelring]» (Starke)

«she is an iron-ring» (Melchert)

akk. *ŠI-ME-ER AN-NA-AK-KI*

UN-QÍ AN.BAR

«(Meine Mutter ist) ein Ring aus Zinn, ein Siegelring aus Eisen» (Starke)

¹⁵ Avec un glissement de sens «anneau» > «ayant un anneau (autour du pénis)» > «circoncis» (Melchert 1983: 140).

¹⁶ KUB 12.1 IV 26 et KUB 42.69 III 27. L'interprétation de ce terme revêt une grande importance dans l'analyse générale des données, comme le montre la suite des discussions. La question est, en définitive, de savoir s'il faut lire *kiik-li-MA-i-me-en-zi* ou *ki-ik-li-BA-i-me-en-zi*. Cf. Košak 1978: 99-123.

¹⁷ Cf. Chantaine 1968: s.v.: on peut isoler un suffixe -voç mais qui laisse le radical *κελαι*- sans explication. Une autre possibilité est de poser un suffixe *-yo- sur base en nasale (* *κελαν-yo*-), peut-être comparable à lat. *columba* (cf. Beekes 2010: s. v.)

¹⁸ Starke 1990: 421-424. Cf. Haas 2006: 282: «sie ist (wie) ein Ring aus Zinn; (wie ein Ring) aus *kiklubaššari*-Metall».

Les équivalences posées sont alors: *dankuliš* = *ANNAKU* et *kiklubaššariš* = *UNQI* AN.BAR, ainsi que le nom de l'anneau *aršiš* = *ŠIMERU*¹⁹. Dans cette analyse, le nom du fer doit être constitué par *kiklubaššariš*, qu'il ne faudrait donc pas interpréter comme composé. Il s'agirait d'un adjectif *kiklubaššari-*, dérivé de **kiklubaššar-* (n.) «fer» (formation en *-ššar* sur **kikluba-*, que l'on trouverait dans *kiklibaimma/i-*)²⁰. Le nom du fer serait ici, en conclusion, un terme louvite **kiklubaššar-*. Cette dernière analyse est reprise par Puhvel (1996): *kiklubaššari-* serait un adjectif louvite servant à qualifier un métal et apparenté au verbe *kiklibai-* «couvrir de fer». Sur le plan morphologique, *kiklubaššari-* serait un dérivé d'appartenance en *-ašša-* augmenté du suffixe *-ri-*. Le terme désignerait plus précisément l'acier que le fer (*hapalki-*) et constituerait un terme culturel, peut-être à rapprocher de gr. χαλυσ, χαλυβος.

La question est cependant loin d'être close, car une troisième analyse remet encore une fois en cause les équivalences entre termes. J'y reviendrai ci-dessous, à propos du nom de l'étain.

Difficile donc de trancher entre ces différentes analyses et hypothèses. Le hittite utilise très certainement l'emprunt fait au hattî *hapalki-* comme équivalent de AN.BAR et de AN.BAR GE₆. Il est *a priori* impossible d'établir une distinction précise entre des variétés de fer («fer gris»/«fer noir»). AN.BAR est probablement le nom donné tant au fer météorique, qu'au fer en général. Derrière AN.BAR se cache peut-être également **kiklu-*, ou **kiklubaššar-* (louvite, **kikluba-* d'origine hourrite?)²¹. Les compléments phonétiques attestés pour AN.BAR (gén. *-aš*, instr. *-it*) ne vont à l'encontre ni de l'une ni de l'autre équivalence. Si *hapalki-* comme nom du fer est généralement bien accepté, les deux autres appellations restent sujettes à controverse. Il est, en outre, difficile d'établir une quelconque distinction entre ces termes.

2. Étain

sum. NAGGA (AN.NA), akk. *ANNAKKU*

**dankuili-*, *dankuli-*, *dankul-* (louv.); *arzili-* (hatt.)

Le nom de l'étain est le plus généralement exprimé à l'aide du sumérogramme AN.NA (NAGGA). Laroche (1966: 180; 1968: 777) identifie un nom de l'étain, *dankuli-*, dérivé de l'adjectif *dankui-* «sombre > le noir, le foncé» (**dankuili-* > *dankuli* par

¹⁹ Le terme n'est pas du tout assuré, et n'est pas attesté par ailleurs à ma connaissance. Cf. Friedrich et Kammenhuber 1975-: s. v. *arši*-2.

²⁰ Avec donc lecture *ki-ik-li-ba'-i-men-en-zi*. La forme reste sans signification précise pour Starke.

²¹ Cf. Haas 2003: 220, qui mentionne hourr. **kikliba-* «fer» attesté dans le nom propre *ki-Γik⁷-li-pa-ta-al-li*.

réduction)²². Les bases de l'identification se trouvent dans le texte de Rash Shamra déjà évoqué à propos du nom du fer (RS 25.421, 21-22).

hitt. *da-an-ku-li-iš-ma-aš ar-ši-i[š]* || *ki-ik-lu-ba-aš-ša-ri-i[š-m]a-aš*

akk. *ŠI-ME-ER AN-NA-AK-KI* || *UN-QÍ* AN.BAR

«elle est un anneau d'étain, elle est un anneau de fer»

Les correspondances établies sont akk. *ŠIMERU* = hitt. *arši[š]* «anneau» et akk. *ANNAKKI* = hitt. *dankuliš* «étain». On pose une racine **dheng^w*- (**dhng^w-i-*, adjectif en **-i-*; cf. les formations en **-lo-*: vha. *tunkal* «noir, sombre», en **-ro-*: v.sax. *dunkar* «id») ²³. Si l'analyse paraît convaincante sur le plan morphologique, le problème principal concerne le sens même de l'adjectif: il est, en effet, curieux que *dankuli-* fasse référence à l'étain, alors que ce métal n'est pas foncé, mais plutôt clair (Hoffner 1968: 41). Starke (1990: 421), pour sa part, identifie ici un adjectif louvite (et non hittite), basé sur *danku(i)-* «sombre, noir». Que le terme soit hittite ou louvite, il possède en tout cas une étymologie bien assurée et s'inscrirait dans la tendance à utiliser des noms de couleur pour nommer des métaux.

Une étude récente vient toutefois remettre en cause l'existence de **dankuili-* et *dankul(i)-*. Soysal (2006) a, en effet, identifié un nom de l'étain d'origine hattie, sur la base de textes provenant d'Ortaköy, qui permettrait de poser une équivalence NAGGA = *arzili-*.

Or 90/328 vs. (II) 5'-8' (mh.)

5' [*e-eš-ri-iš²-še-et Š*]A *ar-zi-li i-e-e[r]*

6' [SAG.DU-*še-et ŠA* AN.BAR] *i-e-er* IGI.ĤI.A-*še-et*

7' [*ŠA* TI₈^{MUŠEN} *i-e-er* Z]U₉.ĤI.A-*uš <ŠA>* UR.MAĤ

8' [*i-e-er*]

«ils firent sa statue en étain; ils firent sa tête en fer; ils firent ses yeux (comme ceux) d'un aigle; ils firent ses dents (comme celles) d'un lion».

Ce fragment permettrait d'éclairer un passage tel que *KUB* 29.1 II 52-54 (*CTH* 414, nh.)

52 ALAM-*iš-ši* NAGGA-*aš i-e-er* SAG.DU-*ŠU* AN.BAR-*aš*

53 *i-e-er ša-a-ku-wa-aš-ši* TI₈^{MUŠEN}-*aš ie-e-er*

54 ZU₉.ĤI.A-*ma-aš-ši* UR.MAĤ-*aš ie-e-er*

«ils lui (le roi) firent une statue en étain; ils lui firent une tête en fer; ils lui firent des yeux (comme ceux) d'un aigle; ils lui firent des dents (comme celles) d'un lion»

²² Réduction *dankuili-* > *dankuli-* selon les termes de Laroche 1966: 180 qui ajoute l'exemple de *karū(i)li-* à l'appui de l'analyse. Hoffner et Melchert 2008: 33 évoquent une variation *ue ~ u* et *ui ~ u*, peut-être à comprendre comme phénomène de syncope.

²³ Tischler 1977-; Kloekhorst 2008: s.v. *dankui-*, qui retiennent *dankuli-* «fait en étain».

Le terme *arzili-*, auparavant interprété de diverses façons (bronze, type de fer, pierre, argent, mortier; Soysal 2006: 111 et n.6), pourrait maintenant recevoir une signification plus précise. Il serait d'origine hattie (**arzi*-²⁴ avec extension *-i-* en hittite, comme pour beaucoup de termes empruntés). Ceci remettrait en cause l'identification d'un terme hittite sur **dankuili-* pour l'étain, d'autant que, souligne l'auteur (renvoyant au *CHD*), *dankui-* est employé comme épithète de la «terre», mais n'est jamais utilisé comme substantif. En outre, dans le fameux texte de Rash Shamra, le contexte abîmé inviterait à lire *da-an-ku-li-iš-ma-aš ar-ši-i-[li-ya'-aš]*, où l'on aurait affaire à une variante graphique pour **arziliyaš* (génitif de matière). En conséquence, l'équivalence *ŠIMER ANNAKKI* = *dankuliš arši[...]* serait à inverser et c'est *dankuliš* qui correspondrait à l'akk. *ŠIMERU* «anneau»²⁵. Si l'hypothèse paraît séduisante à première vue, elle repose toutefois sur des contextes très lacunaires et se fonde sur l'existence d'une variante graphique isolée et peu assurée. Elle demanderait à être étayée par d'autres données relatives à une variation *s/z* dans des emprunts faits au hattî, mais ceci est une autre question, qui dépasse le cadre de cette synthèse.

3. Cuivre

sum. URUDU, akk. *ERŪ*

hitt. *ku(wa)nna(n)-*; hourr. *kabali*; hatt. *kinawar*

Le terme est bien attesté en hittite, depuis le *mh*²⁶. Il désigne le «cuivre», ou des éléments décoratifs tels que des «perles, pierres précieuses» (alors employé avec le déterminatif NA₄). L'équivalence sum. URUDU = hitt. *kuwannan-* comme nom du métal semble assuré, notamment lorsque le terme figure dans une énumération de métaux. Le sens de «cuivre» peut être ancien, dans la mesure où le terme est attesté dès le moyen hittite avec d'autres noms de métaux (Tischler 1977-: s. v.).

Le terme est attesté au génitif sg. ou pl. (URUDU.ḪI.A, *kunnanaš*)²⁷, à l'accusatif (*kuwannan*)²⁸, à l'instrumental²⁹.

²⁴ Non attesté tel quel en hattî, mais bien dans le composé *ištarrāzil* (= *dankui- takn-* «terre sombre»); *arzili* est encore attesté ailleurs, *KBo* 21.22 rs. 41-43: *ḫIŠKUR-aš wa-at-ta-ru i-an-zi nu-wa wa-at-ta-ru ma-a-aḫ-ḫa-an i-ya-an* || *ku-un-na-ni-ta-at ú-e-da-an ar-zi-li-ta-at ḫa-ni-iš-ša-a-an* || AN.BAR-at *iš-ki-ya-an* «ils font le puits du dieu de l'orage et (disent): "comme le puits est fait, il est construit avec du cuivre, il est nettoyé (frotté) avec de l'étain, il est couvert de fer"»: Soysal 2006: 111-112.

²⁵ L'auteur renvoie également aux listes lexicales de Boğazköy et d'Emar: *KBo* 26.34 I 5 sum. ḪAR = akk. [...-R]U = hitt. *da-an-ku-li-iš*; Emar *Msk* 74171b vs. 65 sum. ḪAR = akk. *se-e-mi-ri*. La mise en parallèle de ces deux extraits inviterait à voir dans la colonne akkadienne de la liste de Boğazköy [*ŠI-ME-R*]U.

²⁶ Cité chez Puhvel 1984(-), Tischler 1977-, mais non repris chez Kloekhorst 2008.

²⁷ Voir Goetze 1947. *KUB* 17.21 II 14-17 *A-NA ḫUTU URU-A-ri-in-na šī-it-ta-ri-uš ar-ma-an-ni-uš-ša* || *ŠA KÙ.BABBAR GUŠKIN ZABAR URUDU.ḪI.A* ... || ... *ar-ḫa pīd-da-a-ir* «ils ont emporté les disques solaires et les lunules d'argent, d'or, de bronze et de cuivre»; III 22-24 || *šī-it-ta-re-e-eš ar-ma-an-ni-uš-ša ŠA KÙ.BABBAR GUŠKIN* || *ZABAR ku-un-na-na-aš* ... || ... *Ú-UL ku-iš-ki ú-da-i* «plus personne n'apporte les disques solaires et les lunules d'argent, d'or, de bronze, de cuivre» (*CTH* 375; Lebrun 1980: 132-148). *KBo* 4.2 I 69-70 *nu-wa-az GIŠtu-u-ri-in ku-wa-an-na-aš da-an-du nu-wa-kán kal-la-ar ut-tar pa-ra-a šu-u-wa-an-du* «qu'ils prennent une lance de cuivre et qu'ils repoussent le mot défavorable» (*CTH* 398.A; Bawanyepck 2005: 21-50). Il faut exclure *KUB* 24.12 II 6-7 (cité chez Puhvel avec le sens

On distingue donc entre *ku(wa)nnan-* et ^{NA4}*ku(wa)nnan-*. Le premier terme ferait référence au cuivre en tant que matière, parallèle aux autres métaux. Le second doit se rapporter à des pierres précieuses, probablement à base de cuivre.

Une des principales questions liées au terme est celle de son rapport avec le grec κύαρος «smalt; azurite, sulfate de cuivre, émail bleu foncé, verre bleu», κύανος «bleu foncé tirant vers le noir». Les termes sont-ils apparentés et renvoient-ils à un nom indo-européen du cuivre ou d'une matière foncée; ou bien le grec est-il un emprunt fait à l'anatolien? L'idée d'un emprunt du grec au hittite semble la plus généralement retenue (Frisk 1960-1972: s. v., Chantraine 1968: s. v.; Beekes 2010: s. v.), quoique celle d'un terme culturel méditerranéen soit également formulée (Kammenhuber 1961: 53). Sur le plan étymologique toujours, Puhvel (1984: s. v.) met l'accent sur les différences de sens entre hitt. *kuwannan-* et gr. κύαρος, qui rendraient inconciliables les deux termes, et souligne que hitt. *kuwannan-* ne fait jamais référence à une couleur³⁰. L'auteur semble enclin à poser un terme proprement anatolien, d'origine hattie, avec des formes **kup(a)ro-*, **kuwano-*³¹, renvoyant au nom de Chypre, gr. Κύπρος, lat. *cuprum* «cuivre». On touche là à un des problèmes fondamentaux des appellations de métaux, en général: il n'est pas rare qu'un terme puisse servir à désigner plus d'un métal ou des variétés de métaux qui restent parfois difficiles à distinguer; ils peuvent également changer de sens³². Inversement, on trouve plusieurs désignations, apparemment pour un métal ou des variétés toujours aussi délicates à déterminer³³. Le problème sémantique est ici de taille, puisque les termes grec et hittite désignent à la fois un métal et une autre matière (pierre, verre).

C'est sur ce type de phénomènes que semble reposer l'analyse de Danka et Witczak (1997), qui rapprochent le hitt. *kuwannan-* et le gr. κύαρος de termes iraniens et balto-slaves, en distinguant d'une part les dérivés à segment *-an-*: myc. *kuwano* «verre

«copper»); *nu-kán hu-u-ma-an-da-aš* EME-*an* A-NA KÙ.BABBAR || *ku-na-an-na-na-aš anda-an gul-ša-an-zi* «each on's tongue they engrave upon pieces of silver [and] copper» (trad. Puhvel). Un passage parallèle montre qu'il faut plutôt comprendre ^{NA4}*kunnan-*: II 12 *nu NA4.ku-wa-an-na* KÙ.BABBAR.ḪI.A *i-ya-an-zi nu* EME.ḪI.A *al-wa-an-zi-na-aš an-da gul-ša-an-zi* «they make pieces of copper [and] silver and engrave thereon sorcerous tongues».

²⁸ KBo 4.2 III 18 *ku-wa-an-na-an da-a-i* «il prend le cuivre» (CTH 398.A; Bawanypeck 2005: 21-50).

²⁹ KBo 21.22 rs. 41-43 *DİŠKUR-aš wa-at-ta-ru i-an-zi nu-wa wa-at-ta-ru ma-a-aḫ-ḫa-an i-ya-an* || *ku-un-na-ni-ta-at ú-e-da-an ar-zi-li-ta-at ḫa-ni-iš-ša-a-an* || AN.BAR-*at iš-ki-ya-an* «ils font le puits du dieu de l'orage et (disent): "comme le puits est fait, il est construit avec du cuivre, il est nettoyé (frotté) avec de l'étain, il est enduit de fer» (mh.; CTH 820.4).

³⁰ L'idée de la couleur n'est cependant pas abandonnée et est reprise par Starke 1990: 422, n. 1520, à propos d'un terme qui, *a priori*, n'a rien à voir avec le cuivre: louv. *kuwannani-* «sourcil» pourrait, selon l'auteur, être en relation avec *kuwannan-* (vu comme ancien adjectif substantivé «de couleur foncée, bleu foncé»), par référence à la couleur foncée.

³¹ Avec une variation w/p qui rappelle celle entre *ḫapalki-* et ^{URU}*ḫawalkina-*: cf. Hoffner 1967: 184.

³² Cf., par exemple, pour les langues indo-européennes: **h₂eyes-*: sk. *áyas-* (n.) «métal utilitaire» (par opposition à *híraya-* «métal précieux»), «cuivre», puis «fer», av. *aīyah-* «minerai» (Mayrhofer 1986-2001), lat. *aes* «cuivre; bronze» (Ernout et Meillet 1959). Noter le louvite *kuwanzu-* «lourd, grave», parfois interprété comme signifiant «de plomb»: cf. Melchert 1993, citant Merriggi (non consulté); Starke 1990: 547-548, n. 2027 rejette catégoriquement l'hypothèse.

³³ Joannès 1993; Reiter 1997: *passim*. Voir, par exemple, en akkadien, les discussions autour «des» noms du «fer» (*parzillum*, *amütum*, *ašī'um*, *ḫabalginnu*).

bleu», gr. κούαρος, hitt. *kuwanna(n)-*, ir. **spana-* «fer» dans v.-p. **ā-sana-* «fer», av. *hao.safnaena-* «d'acier» (cf. Abaev 1985: 12-13) et, de l'autre, ceux qui présentent *-in-*: lit. *švinas* «plomb, zinc», lett. *svins* «plomb», rus. *svinéc* «plomb, zinc». Les différentes significations historiquement attestées (plomb, fer, cuivre) constitueraient des indices d'innovations. Toutes ces formes peuvent dès lors, selon les auteurs, être ramenées à un étymon **kwn̥Hos* dont le sens de base ferait référence à l'outillage de base du néolithique, «pierre (utile)», et qui se serait spécialisé dans le sens de «métal». Hitt. *kuwanna(n)-* pourrait, si l'on suit cette reconstruction, être un terme hérité.

4. Argent

sum. KÙ.BABBAR (KÙ «métal; être pur, brillant», BABBAR «blanc»)

akk. *KASPU*

hitt. **harki-*, **harkant-*; hourr. *u/išhuni*; hatt. **hattuš*

louv. *harraya-* (n.) «argent» (**harraya/i-* «blanc»)

Le hittite emploie KÙ.BABBAR, seul ou avec complément phonétique. Ce sont ces compléments phonétiques qui invitent à envisager plusieurs termes dans les textes hittites, de langues différentes.

Hatti: KÙ.BABBAR-*ti* = *Hatti*, KÙ.BABBAR-*ša* = *Hattuša*, d'où KÙ.BABBAR = **hatti* (Laroche 1966: 175)³⁴ ou **hattuš* (Hoffner 1968: 41). KÙ.BABBAR-*ni-wa-az* (*KBo* 5.2 IV 61; *CTH* 471, mh./nh.) pourrait renvoyer au hourrite *ušhuni*, *išhuni* (Laroche 1966: 175).

Pour le hittite, on pose **harki-* (n.) ou **harkant-* (c.) «argent». Les données des autres langues indo-européennes interviennent dans l'interprétation morphologique des formes.

À l'appui d'une forme **harki-* (n.), on peut citer les formes avec complément phonétique KÙ.BABBAR-*i*: par exemple KÙ.BABBAR-*i* GUŠKIN-*an šī-ú-na-aš* «argent et or des dieux» (*IBoT* 2.121 vs. 16; *CTH* 676; vh.), où KÙ.BABBAR-*i* peut se comprendre comme nom.-acc. neutre parallèle à l'acc. sg. GUŠKIN-*an* (Hoffner 1968: 41-42). Il s'agirait donc d'un ancien adjectif de couleur employé pour désigner un métal.

L'adjectif constitue une formation ancienne, à côté d'autres dérivés de la même racine indo-européenne, reconstruite comme **h₂erg-* «briller». Il s'insère dans le système de Caland, où des formes en *-i-* (*harki-*) se présentent notamment à côté de formes en **-ro-*, **-u-*: cf. gr. ἀργός (**ἀργος*), sk. *rjrá-* et formes en *-i-*, gr. ἀργι-όδων «aux dents blanches», sk. *rjī-śvan-* «aux chiens rapides» (le champ sémantique de **h₂erg-* incluant la brillance et la rapidité, vue comme éclat, fulgurance), lat. *argūtus*, sk. *arjuna-*.

³⁴ KÙ.BABBAR-*ni-wa-az iwar PANI DINGIR.MEŠ* ... *parkuiš eš* «à l'instar de l'argent, sois pur devant les dieux», où KÙ.BABBAR-*ni* ne peut être une forme de génitif gouvernée par *iwar*: cf. Hoffner 1993: 46 pour l'emploi «conjunctif» de *iwar* dans la comparaison, où le nom n'est pas au gén. mais à un autre cas; V. Haas, *Materia*, 215 («Wie das Silber (rein ist) so sei du vor den Gottheiten»).

Une forme **harkant-* (c.) est également possible, sur base du complément phonétique KÜ.BABBAR-*ant-* (CTH 364.4.A; nh: Hoffner 1988)³⁵ et des données des langues indo-européennes, où le nom de l'argent est bâti sur une formation en **-nt-*. On note encore une forme particulière: nom. sg. KÜ.BABBAR-*i-an-za*, qui équivaut peut-être à **Harkianza* (Hoffner 1988: 164).

KÜ.BABBAR-*ant-* représente-t-il **harkant-* ou **harkiyant-*? La question a toute son importance, car elle concerne le statut des formes et leur place parmi les autres dérivés indo-européens. Une forme telle que **harkiyant-* ne peut être que de date hittite: il s'agirait là d'un dérivé avec suffixe *-ant-* "individualisant" (Oettinger 2001: 303 et n.8)³⁶. En revanche, une forme comme **harkant-* pourrait être comparée à d'autres dénominations de l'argent dans les langues indo-européennes: lat. *argentum*, celt. *arganto*, av. *arəzātam*, sk. *rajatām* (adj. *rajatā-* «blanc, brillant»), pour lesquelles on pose **h₂rg'-nt-o-*.

Le hittite se distingue, dans la mesure où la formation y est athématique, au contraire des formations des autres langues. Ceci empêcherait, selon Mallory et Huld (1984), une comparaison directe et donc une reconstruction incluant le hittite³⁷. Pour les auteurs, le fait que l'indo-iranien possède un adjectif «blanc, brillant» à côté du nom de l'argent suggérerait un développement propre à la langue (du même type que hitt. *harki-* «blanc» > **harki-* «argent»). Ils rejettent (1984: 4-5), en outre, l'étymologie basée sur **h₂erg-* (pour lequel on attendrait sk. **(a)rj-*, cf. *rjrá*) et posent plutôt **reg-* «être coloré, teint» (cf. gr. ῥέζω). L'hypothèse n'est pas soutenable sur le plan sémantique, car les dérivés de **reg-* font plutôt référence à la couleur rouge³⁸. Le grec et le sanskrit écartés, les auteurs reconnaissent néanmoins dans **h₂(e)rg-nt-o-* le nom indo-européen de l'argent³⁹. Mayrhofer (1986: s.v. *RAJ-*) évoque, pour sa part, la possibilité d'une *vr̥ddhi* irrégulière: **rj-* vers *raj-* (plutôt que vers **arj-* qui serait régulier), avec une forme **rjata-* = av. *arəzāta-*, qui permet de conserver les formes dans un ensemble. Le détail des faits reste complexe et toute la question est, en définitive de savoir si l'on peut reconstruire un nom de l'argent indo-européen. Selon Chantraine (1968: s.v. ἄργυρος), la diversité des

³⁵ Nom. sg. *KUB 17.4 2' [nu] wa-an-nu-um-mi-ya-an DUMU-an KÜ.BABBAR-an-za* _{GIS}P[A-it GUL-ah-ta] «et Argent frappa d'un bâton un garçon orphelin»; dat. sg. *KUB 36.18 ii 7 [... DUMU-iš-s]i? KÜ.BABBAR-an-ti le-e-mukán ku-e-s[í]* «... à Argent: "ne me tue pas"» (à côté dat. sg. KÜ.BABBAR-*i: KUB 17.4 dat. sg. 3 nu wa-an-nu-mi-yaas DUMU-as KÜ.BABBAR-i me-na-a h-ḥa-a[n-da]* 4 *HUL-lu ut-tar te-et* «et le garçon orphelin dit cette méchante parole à Argent»; acc. sg. acc. sg. *HFAC 12 i 7 [i]š-ḥa-mi-iḥ-ḥi-ya-an KÜ.BABBAR-an ša-ni-iz-z[i-in]* «je le chante, Argent le fameux...»).

³⁶ Le fait que la forme soit attestée également à un autre cas (datif sg.) et non au seul nominatif ne constituerait pas un obstacle, cf. Neu 1989: 8-9: vh. génitif *utniyandan*, datif *utniyanti* (sur *utniyant-*, de *utne-* n. «pays»; allatif *hamešhanda* (*hamešhant-*, sur *hamešha-* «printemps»).

³⁷ Les auteurs isolent également lat. *argentum*, qui doit selon eux reposer sur un degré plein. Ceci n'est pas nécessaire: le traitement de **h₂RC-* aboutit à **aRC-* en latin; cf. Meiser 1998: 106.

³⁸ Cf. Chantraine 1968: ῥέζω, ῥέζαι «teindre»; cf. sk. *rājyati* «se colorer, rougir, s'émouvoir», *rāga-* m. «coloration, couleur». Mayrhofer 1986-2001: s.v. *RAJ-* «sich färben, sich röten, rot werden», **(s)reg-*.

³⁹ **h₂(e)rg-nt-o-* est analysé comme ancienne forme de participe. Notons toutefois que toutes les formations en **-nt-* ne sont pas forcément d'anciens participes: cf. Oettinger 2001: 302-303; Dardano 2007.

formations (-*nt*-: lat. *argentum*; -*u*-: gr. ἄργυρος) ne permet pas de poser un nom indo-européen commun de l'argent. À l'appui d'une formation ancienne **harkant*-⁴⁰, on évoque ici aussi l'existence de dérivés de Caland sur **h₂erg*- (Bader 1975: 21; Dardano 2007: 228). Ceux-ci paraissent, en effet, bien représentés dans les langues indo-européennes. Parmi ces dérivés, les formes en *-*nt*- sont des adjectifs, déverbaux ou dénominiaux (thématiques dans sk. *rajatá-*, av. *ərəzata-*, lat. *argentum*, athématique dans hit. *harkant*-[?]), existant à côté de formes en *-*ro*- (sk. *rjrá-*, av. *ərəzra-*, gr. *ἄργρος > ἄργος), *-*u*- (sk. *árjuna-*, gr. ἄργυρος, lat. *argūtus*), *-*i*- (sk. *rji-*^o, av. *ərəzi-*^o, gr. ἀργι-^o, hitt. *harki-*, tokh. A *ārki-*), *-*s*- (gr. ἄργος, ἀργεστής).

Trois dénominations (ou quatre) de l'argent sont donc envisagées: **harki-* (et **harkant-*), **hattuš*, *ušhuni*. Le premier serait le terme courant en hittite; les deux autres auraient été employés occasionnellement (Hoffner 1968: 42), notamment en fonction du contexte linguistique (hatti pour **hattuš*, hourrite pour *ušhuni*). Se pose alors la question de savoir si tous ces noms désignent la même chose, ou des variétés possibles de métal.

5. Or

sum. GUŠKIN; akk. *ḪURĀŠU*

hourr. *ḫiyari*, *ḫiyaruhḫi* (attesté dans des rituels en hourrite)

? hitt. *kurupšini*

Le hittite emploie GUŠKIN. Les compléments phonétiques attestés fournissent peu d'éléments: GUŠKIN-*an* (nom.-acc. neutre, ou acc. sg. de thème en -*a*-: cf. *IBoT* 2.121 vs. 16: KÜ.BABBAR-*i* GUŠKIN-*an* *ši-ú-na-aš*, cité ci-dessus à propos de **harki-*), GUŠKIN-*aš* (génitif), GUŠKIN-*it* (instrumental).

On évoque un possible *kurupšini* qui pourrait désigner une qualité d'or, notamment dans *KUB* 10.89 I 38 LUGAL SAL.LUGAL GUB-*aš* ^PUTU-*AM IŠTU BIBRI* *kur-ru-up-ši-ni akuwanzi* «king and queen standing toast the solar deity from a k. rhyton» (trad. Puhvel). Le terme serait attesté en akkadien, sous une forme avec métathèse *KUPURSINNU/KURUBSINNU*, en référence à une qualité d'or, et peut-être dans le toponyme ^{URU}*Kupurzina*. Ce que désigne *kurupšini* reste toutefois sujet à discussion: qualité d'or⁴¹ ou une forme animale (indéterminée) dans les expressions avec *BIBRU* «rhyton» (Carruba 1967)⁴². Le terme, quoique très rarement attesté, n'est pas un hapax: on a encore un exemple dans un fragment de rituel (99/5 = *KBo* 46.159; *CTH* 670), précisément complété grâce à *KUB* 10.89 (Neu 1970: 168):

⁴⁰ Dans les dictionnaires étymologiques, Tischler 1977-: s. v. *harki-* ne cite pas **harkant-*; Puhvel 1984(-), tient **harkant-* pour une forme ancienne; Kloekhorst 2008, ne se prononce pas.

⁴¹ CAD s. v. *kubursinnu* (*kurubsinnu*, or *kupursinnu*): a quality of gold; OA, Akkadogram in Bogh.; foreign word. On cite, par exemple, x GIN KÜ.GI SIG₅ *ku-bu-ur-ši-ni-im ana PN addin* «I gave x shekels of fine k.-gold to PN» BIN 6 137:2; *bibri ku-ru-up-ši-ni* «rhyton made of k.-metal» (as Akkadogram in Bogh.) *KUB* 10 89 i 39.

⁴² On songe aussi à un rapprochement avec le nom de Chypre: Neu 1987: 181-182 évoque le hourrite *kapali/kabali*, d'une racine **kap/b-* «cuivre», qui pourrait être à la base du nom de Chypre, réputée pour ses ressources en cuivre.

] x x ^DUD-AM [
 [š]u-u[p-p]i-eš-tu-wa-ri-it ku-ru-up[-ši-ni
 a-ku-wa-an-zi ^{LÚ.MEŠ}GALA ŠÌR-RU

«pour le dieu solaire, ils (les chanteurs du culte) boivent (dans un rhyton) étincelant, en métal/forme kurupšini».

Il est difficile de choisir si *kurupšini* désigne un métal ou un animal: l'akk. *BIBRU* est accompagné soit de désignations d'animaux (*BIBRU* GUD «bœuf», GUD.MAḤ «taureau», ŠAḤ «porc», ANŠE.KUR.RA «cheval», UR.MAḤ «lion», MUŠEN «oiseau», etc.), soit de noms de métaux (*BIBRU* GUŠKIN «or», KÙ.BABBAR «argent», ZABAR «bronze») et d'autres matériaux (GIŠ «bois», NA₄ «pierre»).

6. Plomb

sum. A.BÁR (A.GAR₅); akk. *ABARU*; hourr. *abari*
 hitt. *šulai-*, gén. *šuliyas* (c.)

Hitt. *šulai-* est attesté dès les originaux vh. (CTH 732, rituel de Hutusi) et souvent employé avec *ištapulli-* «couvercle» (Tischler 1977-: s; v.; Neu 1980): *KBo* 17.1+ IV 37, cf. *KBo* 18.3+ IV 32 *ištapulli šuliyas* (Neu 1980); *KUB* 17.10 IV 16 *ištappulli* A.BÁR-aš. Le nominatif et l'accusatif sont aussi représentés (*šulaiš*, *šulain*)⁴³.

Hitt. *šulai-* reste isolé sur le plan morphologique: le rapprochement avec gr. σόλος «masse de métal, notamment de fer, météorite» (Chantraine 1968: s. v. σόλος) est proposé par Laroche (1966: 163; cf. Berman 1972: 60 «terme culturel»), mais il reste lâche, faute d'explication pour les deux termes. L'hypothèse alternative fait référence à la couleur (Neumann 1959): hitt. *šulai-* serait apparenté à lat. *livēre* «être livide, couleur de plomb, bleuâtre», bulg. *sliva* «prune» (**slīH-u-eh₂*), formations adjectivales en *-wo- sur une racine **slīH-* en rapport avec la couleur bleue. Sur le plan phonétique, le nom hittite du plomb présenterait un -u- d'anaptyxe (parallèle à *šummitant-* «hache», **smei-t-*) et une spécialisation sémantique vers un nom de métal. Si ce second scénario a le mérite de sortir *šulai-* de son isolement et de donner une explication séduisante sur le plan sémantique, en l'intégrant aux noms de métaux issus de noms de couleur, elle reçoit cependant peu d'appui sur le plan phonétique. La principale pierre d'achoppement réside, en effet, dans cette voyelle -u- d'anaptyxe, car le développement **sl-* > hitt. *šul-* reste douteux⁴⁴.

⁴³ Tischler 1977-: s. v.. Peut-être encore nom. neutre (*KUB* 17.34 IV 4: 1 GÍN AN.NA 1 GÍN *šū-la-a-i* «1 sicle d'étain, 1 sicle de plomb»).

⁴⁴ Oettinger 1976: 95 (la voyelle d'anaptyxe habituelle est *e/i*; celle-ci serait assimilée à *u* au voisinage de *m*, *u*, *w*: *punuš-* «demander», **pneu-*; *šummitant-*, **smei-t-*). Hypothèse rejetée également par Melchert 1994: 175. Cf. Kimball 1999: 431-432; Katz 2007. Kloekhorst 2008: s. v. *šummitant-* réfute le développement d'une voyelle d'anaptyxe *u* de façon générale (cf. *šamen-* < **šmen-*).

7. Bronze

sum. ZABAR (UD.KA.BAR); akk. *SIPARRU*

hitt. *parkui-* (n.) «bronze» (brillant)?

Le hittite emploie ZABAR. Un nom hittite du bronze pourrait être *parkui-*, repris dans le *CHD* (*parkui-* B), mais le terme ne va pas sans problème sémantique. Hitt. *parkui-* est d'abord un adjectif signifiant «pur, non mélangé; clair, propre (en parlant d'une chose nettoyée); innocent» (Tischler 1977: s. v. *parkui-*), ce qui rend curieux son emploi pour désigner le bronze. Pourtant l'équivalence avec ZABAR semble précise: *KBo* 13.1 I 52 (vocabulaire; nh.) *SILA ZABAR = QĀ ZABAR* «un récipient-*qû* en bronze» = *parkuyaš hazilaš* «un récipient-*hazila* en bronze», avec les noms de récipients de mesure *SILA = QŪ = hazila-* et *ZABAR = parkuyaš*. Il faut noter que le *CAD* donne bien akk. *QŪ* (B), comme récipient de mesure, mais cite encore *QŪ* (C) «cuivre, bronze», avec la remarque que le sens de «récipient» pourrait être dérivé de celui de «cuivre, bronze». Le passage du vocabulaire semble par ailleurs pouvoir être compris d'une autre façon (*CAD* «of the pure *hazila* measure», où *hazilaš* et *parkuyaš* sont tous deux entendus comme des génitifs; cf. Otten 1968: 11 «des reinen *h.*-Maßes» ou «*h.*-Maß des Reinen»). On cite encore *parkuwayaš* ^{GIŠ}MAR-an, ^{GIŠ}MAR ZABAR «pelle de bronze», *parkuwaš hašši* «sur/dans un foyer de bronze», GUNNI ZABAR. Pour ce qui concerne la question du sens, Starke (1990: 78 n. 192, 424) retient *parkui-* «bronze», en le comprenant comme un dérivé signifiant «brillant» sur **bhreHg-*⁴⁵ (cf. got. *bairhts* «clair, brillant, évident», sk. *bhrājate* «briller»; et **bhrHg-wo-*, hitt. *parkui-*). Il reste que «brillant» est plutôt le sens de *harki-* (cf. **harki-* et **harkant-* «argent») en hittite et que *parkui-* ne s'applique pas à la brillance. Par ailleurs, la référence à l'idée de «pur, non mélangé» convient *a priori* mal à un alliage tel que le bronze.

Signalons enfin un dernier terme donné comme désignation hittite du bronze: *harašu-*, qui a tout l'air d'un emprunt à l'akk. *ḪURĀṢU* «or», mais qui reste pour le moment sans attestation (Laroche 1966: 181 «le mot hittite serait *harašu-* (communication privée de H. Otten à D. Kennedy)»; Tischler 1977-: s. v.; Weeks 1985: 125; Weitenberg 1984: 26; *CHD*: s. v. *parkui-* B).

⁴⁵ Plutôt que **bhr k'-wo-* (avec extension secondaire en *-i-*), Starke 1990: 78, n. 192, 424. Melchert 1994: 255-256 : **k'* est impossible car il aboutit à une affriquée z. Cf. Mayrhofer 1986-2001: s. v. *bhrāj-* (cf. *bhūrjā-* < **bhrHgō-*); Rix 2001 donne **bhreh₁g-/bhrh₁g-*. Kloekhorst 2008, rapproche, pour sa part, vha. *furben* «nettoyer» et pose **pr k''i-*, donc un adjectif en *-i-* primaire. Le rapprochement reste lâche et la racine incertaine. On compare généralement gr. *πρέπω* «apparaître distinctement», d'où «ressembler, convenir» et arm. *erewim* «être visible, apparaître», v.irl. *richt* «forme, apparence» avec une racine **prep-* «apparaître, être visible» (cf. Rix 2001). La comparaison avec vha. *furben* «nettoyer» reste difficile («rendre visible» > «nettoyer»?).

Pour conclure en quelques mots, le vocabulaire relatif aux métaux dans les textes hittites présente une complexité qui, tout en n'étant pas spécifique au hittite, vaut la peine d'être relevée.

Les problèmes et les questions posés sont, en effet, assez différents selon les termes envisagés. Les hypothèses et analyses peuvent varier considérablement et faire intervenir plusieurs langues (hittite, hattî, hourrite, akkadien). Le cas du nom du fer est exemplaire à cet égard.

On relève la tendance, par ailleurs connue dans les langues en général, de faire usage de noms de couleur ou de nuances pour dénommer des métaux. Il s'agit là d'un des arguments forts pour ou identifier ou expliquer un nom de métal en hittite: ainsi *ḫarki-* (n.) «argent» sur *ḫarki-* «blanc, brillant», *parkui-* (n.) «bronze» sur *parkui-* «brillant» ou «clair, propre», **dankui*, *dankuli-* (louv. *dankul-*) «étain» à partir de *dankui-* «sombre». L'association ne va pas toujours sans problème, dans la mesure où le lien entre couleur et métal est parfois difficile à justifier (ainsi pour l'étain, le bronze, le cuivre). Le sens même des termes et leur usage comme noms de métaux sont souvent problématiques. Ainsi hitt. *kuwanna(n)-* est parfois rapproché du gr. κύανος, mais concilier les termes sur le plan sémantique est délicat, et plus encore si l'on inclut d'autres termes de langues indo-européennes dont les significations varient considérablement (plomb, fer, cuivre, zinc). On sait aussi à quel point la perception des couleurs et par là leurs dénominations peuvent varier selon les langues, les époques. Les affinités perçues entre couleurs et métaux diffèrent d'une langue à l'autre et procèdent souvent de développements propres. Une relation terme à terme est dès lors le plus souvent impossible à poser. Seuls les contextes d'emplois – descriptions, qualifications – peuvent permettre d'appréhender plus précisément la sphère chromatique ou matérielle des termes, mais ceux-ci nous font le plus souvent défaut dans la documentation, tant pour les termes considérés comme d'origine indo-européenne que pour les formations proprement hittites ou pour les emprunts.

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LES ROLES DU METALLURGISTE DANS LES CEREMONIES RELIGIEUSES DE L'ANATOLIE HITTITE

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Abstract

This paper is an inquiry on the cultic and ritual functions of the metallurgist in the Hittite religious ceremonies. Three main cultural areas are considered: the Kizzuwatna (Southern Anatolia), the Hattian heartland and the Luwian realm (Western Anatolia). In Kizzuwatna, the metallurgists create a new divine body for the deity whereas in the Hattian area, they are sometimes engaged in a contest.

INTRODUCTION

Nombreux sont les textes cunéiformes hittites qui mentionnent le métallurgiste (^{LÚ}SIMUG(.A)¹) dans le contexte de cérémonies religieuses. Bien que cette présence ait été constatée depuis longtemps, aucune étude systématique n'a, jusqu'à présent, tenté d'en expliquer la raison². C'est cette lacune que je me propose d'essayer de combler ici. La liste des textes religieux dans lesquels un ou plusieurs métallurgistes apparaissent se trouve dans l'ouvrage de référence de F. Pecchioli Daddi³. J'ai également eu la chance de bénéficier des fiches de l'Académie des Sciences de Mayence pour compléter ce corpus⁴. Les différents témoignages seront étudiés au sein de leur aire culturelle propre, autant que faire se peut. Afin de délimiter le présent corpus, je me suis cantonnée aux mentions explicites de métallurgistes en contexte religieux. Par ailleurs, les textes trop fragmentaires en ont été exclus, à l'exception de ceux qui paraissaient donner des informations importantes pour mon propos.

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¹ À ma connaissance, la lecture hittite de ce sumérogramme est encore inconnue de nous. Seuls les compléments phonétiques *-iš* pour le nominatif comm. sg. et *-in* pour l'accusatif comm. sg. peuvent être remarqués, ce qui implique une racine nominale en *-i*. Une forme ^{LÚ.MEŠ}SIMUG.A-*aš* est également attestée, mais elle désigne sans doute un cas oblique pl. Contrairement au hittite, la lecture hattite du sumérogramme ^{LÚ}SIMUG(.A) est connue grâce au texte bilingue KBo 37.1+ (cité ci-après) : il s'agit du terme **huzzaššai(l)-* (Soysal 2004 : 282).

² La présence d'un ou de plusieurs métallurgistes dans des cérémonies religieuses hittites est cependant brièvement évoquée dans Görke 2010 : 256-258. Sur la métallurgie hittite en général, voir *RIA* 8 : 112-119 et, en dernier lieu, Siegelová et Tsumoto 2011.

³ Pecchioli Daddi 1982 : 37-41.

⁴ J'ai eu l'occasion de consulter ces fiches en Novembre 2007. Je tiens à remercier le Pr. G. Wilhelm et le Dr. S. Košák pour leur accueil chaleureux au sein de cette Académie. Mes remerciements vont également au Pr. T. van den Hout qui a fait une relecture efficace de cet article et m'a suggéré plusieurs améliorations de traduction. Je reste toutefois seule responsable des éventuelles erreurs qui ont pu persister.

1. Les métallurgistes dans les cérémonies religieuses kizzuwatniennes (ANNEXE, 1)

Trois textes relevant de cette sphère culturelle ont été sélectionnés. Tous trois mettent l'accent sur le rôle essentiel du métallurgiste au sein des cérémonies religieuses : cet artisan confectionne une effigie divine en métal. Dans le texte 1.1., on utilise le verbe *zinna-* « terminer, achever » pour décrire l'action des métallurgistes sur la statue. Le texte 1.2. utilise le verbe *iya-* « faire », alors que 1.3. emploie un verbe plus spécifique, à savoir *lahuwai-* « couler ». Les trois extraits font allusion à un groupe travaillant en collaboration.

1.1. Le rituel de purification KBo 24.45+ Ro 31' CTH 479

Aucun incipit ni colophon n'a été préservé en entier pour cette composition. Outre des offrandes et autres gestes rituels (dont celui, encore mystérieux pour nous, consistant à « frapper le *kupti-* »), le texte indique : « Quand les métallurgistes viennent terminer la divinité, ils enlèvent la main. » Le sens précis de cette dernière expression « enlever la main » (*kiššeran=kan arha dā-*) pourrait être débattu, car elle ne semble pas très courante. L'expression qui s'en rapproche le plus se trouve dans les Annales bilingues de Hattušili I^{er}, dans lesquelles on lit en hittite : « (Moi), le Grand Roi, le Tabarna, j'ai pris les mains des esclaves féminins de la meule et j'ai pris les mains des esclaves masculins du travail (*ŠA GĒME^{MES}=ŠU ŠU^{MES}-uš IŠTU^{NA4}ARA₅ dahhun ŠA İR^{MES}=ya ŠU^{MES}=ŠUNU IŠTU KIN dahhun*). Je les ai libérés des corvées *šahhan* et *luzzi*. J'ai défait leur ceinture et je les ai cédés à la déesse Soleil d'Arinna, ma maîtresse. » La version akkadienne utilise une expression quelque peu différente, qui précise le sens de l'expression hittite : « Le Grand Roi, le Tabarna, a éloigné les mains de ses esclaves féminins de la meule et aussi il a éloigné les mains de ses esclaves masculins (*ša g[éme]^{mes}=šu šu^{mes}=šina ina^{na4}araš uddapper u ša ir^{mes}=šu qātam[m]a ina qāti=šunu uddapper*), il a défait leur ceinture et les a mis au service du temple de la déesse Soleil d'Arinna. Sous la protection du ciel, j'ai établi leur *andurārum*. En outre, il a fait une statue d'or et l'a offerte à la déesse Soleil d'Arinna⁵. » Dans le contexte de notre rituel de purification, l'expression « enlever la main » semble par conséquent indiquer que les métallurgistes, après avoir fini la fabrication de l'effigie divine, la confient à d'autres personnes et n'ont plus, quant à eux, aucune responsabilité sur elle. Après ce passage, on déplace la statue divine dans un lieu inculte et on attire la divinité, afin qu'elle s'installe dans ce nouveau corps. Comme nous le verrons dans le texte suivant, il est fort probable que cette action rituelle ne soit pas du ressort des métallurgistes, mais plutôt des prêtres, ce qui confirmerait encore l'interprétation proposée pour l'expression « enlever la main ».

⁵ KBo 10.2 iii 15-20 – version hittite / KBo 10.1 Vo 11-14 – version akkadienne (Dardano 2002 : 376-377) : LUGAL.GAL *tabarnaš ŠA GĒME^{MES}=ŠU ŠU^{MES}-uš IŠTU^{NA4}ARA₅ dahhun ŠA İR^{MES}=ya ŠU^{MES}=ŠUNU IŠTU KIN dahhun n=aš=kan šahhanit luzzit arawahhun n=aš QABLI=ŠUNU arha lānun n=aš ANA^{DUTU} URU^{TUL}-na GAŠAN=YA EGIR-an tarnahhun / lugal.gal *tabarna ša g[éme]^{mes}=šu šu^{mes}=šina ina^{na4}araš uddapper u ša ir^{mes}=šu qātam[m]a ina qāti=šunu uddapper qabli=šunu iptur=ma ina é^{dutu} uru^{tul}-[na] ištakan=šunu ina šapal šamē amar.ar.gi=šunu aštakan u alam ša kù.gi ipuš=ma ana^{dutu} uru^{tul}-na ušeli.**

1.2. *Le rituel de fondation d'un nouveau temple de la déesse de la nuit KUB 29.4 i 6-18 CTH 481*

L'incipit du texte précise que le rituel est destiné à « installer séparément » la déesse⁶, c'est-à-dire à lui créer une nouvelle demeure ainsi qu'une nouvelle incarnation sous la forme d'une effigie. Tout comme dans le rituel précédent, les métallurgistes sont chargés de confectionner ce nouveau corps divin. Ce texte est sans conteste le plus précis que nous ayons sur la confection d'une statue divine. Il utilise manifestement des termes techniques dont la traduction reste incertaine, faute de parallèles : « incruster (?) » (EGIR-an išgara- : mot à mot « fixer à l'arrière »), « placer, installer (un élément de la statue avec une pierre) » (IŠTU^{NA4} ... dai-)⁷. Un autre élément remarquable de ce passage est la représentation d'une divinité mineure, la divinité astrale Pirinkir, sur celle d'une divinité plus importante, la déesse de la nuit. Il faut remarquer que cette divinité mineure est représentée sous sa forme astrale, et non anthropomorphe, d'où la nécessité, sans doute, de préciser son identité. Cette combinaison de deux représentations en une montre à quel point l'iconographie religieuse peut être complexe, même à ces époques hautes. Les métallurgistes ne réapparaissent pas dans la suite du rituel. Leur rôle se confine à la fabrication de l'effigie. C'est le prêtre SANGA qui se charge d'attirer la déesse dans son nouveau corps.

1.3. *La tablette-catalogue KBo 31.4+ v 21'-28' CTH 277*

On y remarque le rituel dit de Tulpiya, Nāniyanni, Mātī, Ammiyata et Pāpanikki de Kummanni que l'on pratique « lorsque le métallurgiste coule une nouvelle divinité ». Ce rituel n'est malheureusement pas encore connu par d'autres textes.

2. Les métallurgistes dans les textes religieux louvites (ANNEXE, 2)

Seul un texte a été sélectionné dans cette section, car il est le seul, à ma connaissance, à être suffisamment préservé pour être traduit.

2.1. *Le fragment de rituel avec incantations louvites KUB 32.8 iv 24' CTH 762*

L'une de ces incantations louvites mentionne le métallurgiste. L'adjectif *tapan* qui qualifie l'œuvre que ne doit pas réaliser le métallurgiste dans cette formule de magie analogique est malheureusement obscur⁸. Quoi qu'il en soit, il semble bien que le métallurgiste n'est pas, ici, un véritable protagoniste du rituel, mais est seulement mentionné dans le contexte de cette incantation.

⁶ *mān apēz IŠTU É DINGIR.GE₆ parā tamai É DINGIR.GE₆ uetazzi namma=za DINGIR-LAM hantī ašaši* « Quand il construit un autre temple de la déesse de la nuit à partir de cet (ancien) temple de la déesse de la nuit, et qu'ensuite il installe la déesse séparément... ».

⁷ Pour d'autres termes techniques relevant de la métallurgie, voir *RIA* 8 : 118.

⁸ Melchert 1993: 206.

3. Les métallurgistes dans les cérémonies religieuses hatto-hittites (ANNEXE, 3)

Plusieurs dénominateurs communs peuvent être remarqués dans ces divers extraits de fêtes religieuses d'origine hattie :

- Les métallurgistes, presque toujours représentés par leur chef, interviennent ponctuellement pour apporter un objet métallique qu'ils ont fabriqué pour l'occasion : une paire de rhytons en forme de tête bovine en argent (pendant les fêtes de l'AN.TAH.ŠUM et du KI.LAM), une lance de cérémonie(?) en fer (pendant la fête du KI.LAM), notamment.

- Lors de la fête du KI.LAM ainsi que dans le fragment 3.12., ils participent à une sorte de compétition qui oppose leur adresse (fête du KI.LAM) ou, peut-être, leur rapidité (fragment 3.12.). Ces joutes au sein d'un même corps de métier sont bien connues des fêtes religieuses hatto-hittites⁹.

3.1. *L'inventaire KUB 38.12 i 17 (et dupl.) mentionnant le dieu tutélaire de Karahna CTH 517*

Ici, on ne peut pas à proprement parler de fonction rituelle pour les métallurgistes, mais on remarque toutefois un fait important : certains métallurgistes sont au service des temples et participent parfois à leur réfection.

3.2. *IBoT 1.29 Ro 24 (et dupl.) fête haššumaš CTH 633*

Un « métallurgiste de la divinité » (1 ^{LÜ}SIMUG.A DINGIR^{LIM}) est mentionné parmi le personnel du temple prenant part à la cérémonie. Cette expression montre clairement que certains métallurgistes faisaient partie du personnel des temples.

3.3. *KUB 11.21a+ vi 1'-15' (et dupl.) fête d'hiver pour la déesse Soleil d'Arinna CTH 598*

Cette fête contient plusieurs séquences rituelles pendant lesquelles un métallurgiste reçoit puis donne un objet ou une offrande. Ces transmissions d'objets rituels sont très fréquentes dans les cérémonies religieuses hittites, mais les protagonistes sont, eux, plus inhabituels.

3.4. *KBo 11.36 v 15-16 inventaire pour une fête religieuse CTH 523*

Ce texte mentionne, entre autres choses, des rations alimentaires distribuées à différents personnages. C'est dans ce contexte qu'on mentionne des pains donnés aux métallurgistes d'Arinna. Ceux-ci sont également mentionnés dans la fête d'hiver en l'honneur de la déesse Soleil de cette ville hattie. Il est par conséquent possible que ces rations se rapportent à cet événement religieux.

3.5. *La fête d'AN.TAH.ŠUM CTH 612*

Plusieurs textes relatifs à la grande fête calendaire d'AN.TAH.ŠUM mentionnent un ou plusieurs métallurgistes. Ils interviennent en tant qu'artisans auteurs de rhytons en

⁹ Archi 1978: 20-24 ; Haas 1986 ; Gilan 2001 ; Birchler 2007.

forme de têtes bovines. Cet élément se retrouve à l'identique dans la grande fête du KI.LAM.

3.6. La fête du KI.LAM CTH 627

Comme pour la fête précédente, plusieurs passages mentionnent le métallurgiste. L'extrait 3.6.2. fait manifestement allusion à une compétition organisée pendant la fête entre plusieurs métallurgistes. Il semble que les deux rhytons en forme de têtes bovines soient comparés et que l'auteur de l'œuvre la plus réussie soit récompensé. Les extraits 3.6.3. et 3.6.4. font tous deux allusion au fait que le chef des fonctionnaires du palais entraîne le chef des métallurgistes par le manteau. Ce geste est sans parallèle exact, bien qu'il me rappelle une séquence d'une fête de la ville louvite de Lallupiya¹⁰. L'extrait 3.6.6. mentionne le « paiement » du chef des métallurgistes pour sa participation à la célébration religieuse. Quant au texte 3.6.5., il fait allusion à un chant entonné par des orfèvres.

3.7. KUB 25.27 ii 21'-25' fête nuntarriyašha- CTH 629

Dans ce contexte, les métallurgistes ont un rôle religieux manifeste : ils célèbrent une divinité. Il s'agit du seul texte qui, à ma connaissance, attribue clairement ce rôle aux métallurgistes. Il faut en outre noter qu'une partie des animaux offerts en sacrifice par les métallurgistes provient du cheptel propre de ceux-ci.

3.8. KUB 30.32 i 6-8 (et dupl.) fête purulli- à Nerik CTH 674

Les métallurgistes de la ville d'Arinna sont présents. Ils installent des effigies divines dans le temple *hešta-*. Ils se chargent également de « traiter » des objets métalliques vraisemblablement destinés à ces divinités. Dans ce contexte, le sens précis du verbe *takliya-* est incertain¹¹. Il apparaît un peu plus loin dans le même texte (i 11-13 – avec dupl.) : « Où que soit le bois de construction, dans le temple *hešta-* du haut (ou) du bas, s'il (y a) quelque *dysfonctionnement* ou quelque chose de *purašta-*, le maire le *takliya-* à nouveau¹². » D'après ce passage, il n'est pas impossible que le verbe *takliya-* signifie « réparer » ou « renforcer », comme le suggère J. Tischler¹³, mais cela reste hypothétique en raison de la difficulté de traduire les noms *lūri* et *purašta-* avec précision¹⁴.

3.9. KUB 58.33 iv 25'-27' fragment de fête religieuse à Nerik CTH 678

Le métallurgiste reçoit une peau de bœuf en paiement. Ce contexte rappelle la rétribution donnée au chef des métallurgistes lors de la fête du KI.LAM (texte 3.6.6.).

¹⁰ KUB 25.37+ i 8'-9' ; ii 17' (Starke 1985: 342-343 ; 345).

¹¹ HEG T : 39.

¹² CHD L-N : 87 et CHD Š : 248 : ^É*heštā šarazzi kattēr kuwapi w[(etešnaš)] Giš-ru naššu lūri kuitki našma puraštan [(kuitk)i] n=at ^{LÜ}*HAZANNU EGIR-pa taklēzzi*.*

¹³ HEG P : 657.

¹⁴ CHD L-N : 86-87 et HEG P : 657.

3.10. KBo 20.3 iii 3'-5' et dupl. fête de Zippalanda et du Mont Daha CTH 635

Un métallurgiste de la ville de Zippalanda dépose des pains en guise d'offrandes. Cet extrait est celui qui se rapproche le plus du texte 3.7., dans lequel des métallurgistes offrent des animaux sacrificiels et d'autres denrées alimentaires à une divinité.

3.11. IBoT 2.94 vi 7' fragment de texte décrivant une fête religieuse

Cet extrait doit être rapproché de KUB 11.21a+ (texte 3.3.), car il mentionne les mêmes protagonistes. Peut-être appartient-il à la même composition. Il semble, en effet, qu'il soit le seul, avec KUB 11.21a+, à associer le chef des métallurgistes au chef des scribes sur tablettes en bois.

3.12. Bo 3371 : 5-12 fragment de fête religieuse

Ce texte n'est pas sans difficulté philologique, en particulier à cause de l'emploi systématique du sumérogramme ^{LU}DE.E probablement mis pour ^{LU}E.DE = ^{LU}SIMUG¹⁵. Notons que la lecture ^{LU}SIMUG¹ pour ce sumérogramme peut être confirmée par les parallèles 3.6.1. et 3.6.2.¹⁶, où il est clairement question d'un métallurgiste. Il semble que, dans le présent fragment, une véritable compétition a lieu entre les métallurgistes. Le premier qui finit son objet est apparemment distingué des autres, de même que le second. L'accent semble donc être mis sur la rapidité des concurrents, et non sur la qualité de l'objet confectionné, contrairement à la compétition ayant lieu lors de la fête du KILAM (textes 3.6.1. et 3.6.2.).

3.13. KBo 37.1+ ii 11-13 rituel de fondation bilingue hatto-hittite CTH 726

Ce rituel comprend un récit mythologique dans lequel la déesse Kamrušepa appelle un métallurgiste pour fixer dans la terre des clous de fondation en fer.

4. Textes relatifs à des rituels syriens

4.1. KUB 58.109+ i 15'-21' et dupl. rituel d'Allaiturahhi CTH 780

Ce passage indique que l'on achète le métal et les pierres précieuses au métallurgiste, ce qui pourrait indiquer, à mon sens, que dans ce contexte précis, on ne fait pas appel à un métallurgiste dépendant d'un temple, mais à un artisan « indépendant ». Le métallurgiste ne participe pas à la cérémonie religieuse mais se contente de fournir une partie du matériel liturgique.

5. Autres textes

5.1. KUB 38.37 iii 16-20 compte rendu de procès CTH 295

Il ne s'agit pas d'un texte religieux à proprement parler. Le texte fait cependant allusion à la confection de deux statues divines par un métallurgiste du nom de Piha-

¹⁵ Voir CHD § : 125 et Weeden 2011 : 154 note 687.

¹⁶ Parallèles déjà mentionnés par CHD § : 125.

muwa. Il s'agit, semble-t-il, du seul texte hittite mentionnant un métallurgiste de ce nom¹⁷. La dernière phrase du passage cité fait, vraisemblablement, plus particulièrement allusion au placage en argent des deux statues divines en question.

CONCLUSION

Dans le contexte des fêtes religieuses d'origine hattie, les métallurgistes ne sont jamais expressément mentionnés en relation directe avec la confection d'une effigie divine. À l'inverse, le corpus religieux kizzuwatnien montre que les métallurgistes participent à la naissance symbolique d'une nouvelle divinité par la fabrication du corps métallique de celle-ci. Dans les deux corpus (hatto-hittite et kizzuwatnien), les métallurgistes n'interviennent que ponctuellement et en tant que techniciens du métal. Il y a tout lieu de penser que la majorité – voire l'ensemble – des métallurgistes mentionnés dans nos textes sont au service d'un temple en particulier. Plusieurs tablettes montrent clairement que ce corps de métier est représenté au sein des institutions religieuses, et il paraît par conséquent logique ce soit ces métallurgistes-là que l'on sollicite en premier à l'occasion d'une célébration cultuelle. Le rituel d'Allaiturahhi, en revanche, indique qu'il est parfois possible de se fournir en métal précieux auprès d'un métallurgiste « indépendant », mais dans ce cas celui-ci ne participe en rien à la cérémonie religieuse.

Enfin, il faut remarquer la présence, dans plusieurs fêtes cultuelles provenant de la sphère culturelle hattie, des métallurgistes de la ville d'Arinna¹⁸. Il semble bien que cette cité ait été le berceau d'une importante « école » de métallurgistes anatoliens. D'aucuns pourraient voir dans ce phénomène une confirmation de l'identification hypothétique d'Arinna avec le site archéologique d'Alaca Höyük¹⁹, où de nombreux objets métalliques de haute qualité ont été mis au jour dans le niveau d'occupation précédant juste le début de l'Ancien Royaume hittite²⁰. Ces objets, dont les célèbres « étendards », ont été retrouvés dans des tombes « princières » et pourraient relever de la culture hattie. Nos textes se feraient ainsi l'écho de la continuation de cette tradition métallurgique locale²¹. À côté d'Arinna, Karahna et Zippalanda²² sont les deux autres villes qui sont associées à des métallurgistes dans nos textes, bien que moins fréquemment.

¹⁷ Laroche 1966 : 139 n°964.

¹⁸ Pecchioli Daddi 1982 : 39 et Popko 2009 : 76.

¹⁹ Erkut 1992 et Gorny 1997 : 556 note 4.

²⁰ Cette identification ne fait cependant pas l'unanimité. Baltacıoğlu 2004 remet en question les arguments qui ont servi à identifier Arinna avec le site archéologique d'Alaca Höyük. M. Forlanini suggère, quant à lui, d'identifier Arinna à Büyük Nefes Köy (*RGTC* 6/2 : 11 avec bibliographie). Popko 2009 ne semble pas proposer d'identification, mais rejette l'équation Arinna = Alaca Höyük, car il pense que ce site renferme plutôt Zippalanda (Popko 2009 : 5 note 9 avec bibliographie).

²¹ Pour une suggestion analogue, voir Erkut 2003 : 76.

²² Pecchioli Daddi 1982 : 39-40.

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ANNEXE : CORPUS DE TEXTES

1. Rituels en provenance du Kizzuwatna :*1.1. KBo 24.45+ Ro 31' rituel de purification CTH 479 (Strauss 2006 : 315)*

« Quand les métallurgistes viennent terminer la divinité, ils enlèvent la main²³. »

1.2. KUB 29.4 i 6-18 rituel de fondation d'un nouveau temple de la déesse de la nuit CTH 481 (Miller 2004 : 272-310)

« Les métallurgistes font la divinité en or. Tout comme (est) son (ancienne) image, ils la font entièrement de la même manière²⁴. Tout comme (sont) *incrustés* sur elle des (éléments) de pierres *kunnan-*, d'argent, d'or, de lapis-lazuli, de cornaline, de pierre de Babylone, de *calcédoine*, de *quartz*, d'albâtre, (ainsi que) des disques astraux, un symbole de vie et une *comète* en argent et or, ils font (cela) entièrement de la même manière. § Un disque astral en or d'un sicle – son nom (est) la divinité Pirinkir – un nombril en or, une paire de *purka-* en or – ils sont installés avec de la pierre de Babylone. Le prêtre SANGA les confie aux métallurgistes pour (fabriquer) son image²⁵. »

1.3. tablette-catalogue KBo 31.4+ v 21'-28' CTH 277 (Dardano 2006 : 104-105)

« Une tablette. Terminée. Parole de Tulp[ia], Nāniya[n]ni, Māti, Ammiya[t]ala (et) Pāpanikki du pays de [Ku]mmanni : si les métallurgistes coulent une nouvelle divinité et comme ils finissent de la faire, (voici) son rituel²⁶. »

2. Textes religieux relevant de la sphère louvite*2.1. KUB 32.8 iv 21'-27' fragment d'un rituel avec incantations louvites CTH 762 (Laroche 1959 : 157 ; Starke 1985 : 120 et Lebrun 1987 : 188-189 ; traduction personnelle)*

« Celui qui [fait] du mal au commanditaire du rituel, que pour lui tous les dieux écrasent [...] sur celui-ci ! Qu'ils clouent [...] (sur) celui-ci avec un clou de cuivre ! Désormais, d[e même] que le cuivre ne va pas [à ...] et que le métallurgiste n'en fait pas

²³ [GIM]-an=ma uwanzi LÚ.MEŠ SIMUG DINGIR^{LAM} zinnanzi kiššeran=kan arha da[nzi].

²⁴ Cette phrase hittite est impossible à rendre de manière littérale en français. Mot à mot, elle indique : « Pour la divinité la façon dont (est) sa production, ils terminent de la faire de la même manière. » Pour le sens abstrait de *aniur* dans ce contexte, voir Miller 2004 : 298.

²⁵ LÚ.MEŠ SIMUG.A=ma DINGIR^{LAM} KÙ.GI ienzi ANA DINGIR^{LIM}=ma aniur=šet mahhan n=an aniyauwanzi QĀTAMMA šarā tittanuwanzi EGIR-an išgaranta=ya=(š)šī^{NA4} kunnanaš mahhan ŠA KÙ.BABBAR KÙ.GI^{NA4} ZA.GIN^{NA4} GUG^{NA4} KĀ.DINGIR.RA^{NA4} NĪR^{NA4} DUH.ŠÚ.A^{NA4} AŠ.NU¹¹.GAL AŠ.ME^{HA} ZI^{TUM MUL} wannuppaštalliš=(š)a ŠA KÙ.BABBAR KÙ.GI n=aš iyauwanzi QĀTAMMA šarā tittanuwanzi § 1 AŠ.ME KÙ.GI ŠA 1 GIN ŠUM=ŠU^D Pirinkir 1 LI.DUR KÙ.GI 1^{NU^{TIM}} purkiš KÙ.GI n=at IŠTU^{NA4} KĀ.DINGIR.RA tiyanteš n=aš ANA LÚ.MEŠ SIMUG.A aniur=šet LÚ SANGA lamniyazi.

²⁶ 1 TUPPU QATI [AW]AT¹ Tulp[ia] Nāniya[n]ni Māti Ammiya[t]ala Pāpanikki ŠA KUR^{UR} [Ku]mmanni mān [LÚ] SIMUG.A DINGIR^{LAM} GIBIL lā[huw]anzi mahhan=ma an[ia]uwanzi zi[nnanzi] nu kī ŠISKUR=ŠU.

une œuvre *tapan*, de même, désormais, qu'il ne subisse pas²⁷ le *tapāru*, la malédiction, la pauvreté, le parjure²⁸ ! »

2.2. KUB 35.14 i 12' (CTH 762)

est un autre texte appartenant à ce corpus, mais il est trop fragmentaire pour être traduit²⁹.

3. Textes religieux relatifs à la sphère culturelle hattie

3.1. KUB 38.12 i 17 (et dupl.) inventaire mentionnant le dieu tutélaire de Karahna CTH 517 (Taggar-Cohen 2006 : 21-23)

i 1-2 : « Pour le dieu tutélaire de la ville de Karahna³⁰, de l'argent et de l'or (ont été) comptés. Son temple intérieur (a été) réparé par un orfèvre et un graveur³¹. » ; i 17 : un « métallurgiste (responsable) des objets du temple³² » est inclus dans le personnel du temple du dieu tutélaire.

3.2. IBoT 1.29 Ro 24 (et dupl.) fête haššumaš CTH 633 (Mouton 2011a)

« Métallurgiste de la divinité » (1 ^{LÚ}SIMUG.A DINGIR^{LIM}).

3.3. KUB 11.21a+ (et dupl.) fête d'hiver pour la déesse Soleil d'Arinna CTH 598

KUB 11.21a+ i 6'-7' : « Le métallurgiste donne un pain aigre au roi et le roi le rompt³³. » KUB 11.21a+ vi 1'-15' (et dupl.) : « Le chef des responsables de la table avance. Il prend un pain *wagata*- de la table de la divinité. Il le donne au chef des métallurgistes de la ville d'Arinna et il repart. Il se prosterne et s'en va. § Le chef des scribes sur tablettes en bois, le chef des métallurgistes et le chef des responsables de la table sont présents. Le chef des responsables de la table prend des *kunzita* (et) des *disques astraux* et il les donne au chef des scribes sur tablettes en bois. (Puis) le chef des scribes sur tablettes en bois les donne au chef des métallurgistes³⁴. » KUB 10.28 ii 9-14 : « Le

²⁷ Il = le commanditaire du rituel. Pour ce sens de *manā-*, voir Melchert 1993 : 135.

²⁸ [kui]š=dur a<d>duwa[l ānniti EN SÍŠ]KUR-ya a=du=(t)ta [ta]nininzi DINGIR^{MEŠ}-z[i ...]x šarra zātī [(p)]ūwandu (a)=ata=tar za[tī ...]x tarmaindu URUDU-yati [tar]mati URUDU=pa=tar zila k[uwatin ... n]āwa iti ^{LÚ}SIMUG=pa=an [t]apan KIN-an nāwa ati [ta(r)miš=ti=t)]a tapāru [t]atariamman āššiwant[attar] hērun zila apatin niš [(man)]āti.

²⁹ Starke 1985: 124-125.

³⁰ Très vraisemblablement le site archéologique de Sulasaray, la Sebastopolis du Pont de l'Antiquité classique (voir Mouton 2011b).

³¹ [(ANA)] ^DLAMMA ^{URU}Karahna KÙ.BABBAR KÙ.GI *kappūwan* É.DINGIR^{LIM}=ši [(and)]urza IŠTU ^{LÚ}KÙ.DÍM ^{LÚ}BUR.GUL SIG₅-ahhan.

³² ^{LÚ.MEŠ}DÉ.DÉ'.ZA ŠA É ^{GIŠ}KIN-TI=ši=kan anda DIB-anza (pour cette lecture, voir Pecchioli Daddi 1982 : 37 note 3 et 211 avec bibliographie antérieure).

³³ ^{LÚ}SIMUG 1 NINDA.GUR₄.RA EMŠA LUGAL-i pāi LUGAL-uš paršiya.

³⁴ [(UGULA ^{LÚ} ^{GIŠ}BANŠUR=kan anda paizzi ta IŠ)]TU ^{GIŠ}BANŠUR DINGIR^{LIM} [(1 ^{NINDA}wag)]atan dāi [(n=a)]n ANA <(UGULA)> ^{LÚ.MEŠ}SIMUG [(URU)]Arinna pāi' n=aš EGIR-pa paizzi n=aš UŠGEN n=aš=kan parā paizzi' § ta GAL ^{LÚ.MEŠ}DUB.SAR.GIŠ GAL ^{LÚ.MEŠ}SIMUG GAL ^{LÚ} ^{MEŠ}GIŠBANŠUR=ya aranda nu UGULA ^{LÚ} ^{MEŠ}GIŠBANŠUR *kunzita šittarra dāi n=at ANA UGULA ^{LÚ.MEŠ}DUB.SAR.GIŠ pāi GAL ^{LÚ.MEŠ}DUB.SAR.GIŠ=ma=at ANA GAL ^{LÚ.MEŠ}SIMUG pāi*. Il y a un doute sur le sens de *šittar* traditionnellement traduit par « disque astral » : voir Kloekhorst

chef des cuisiniers accourt devant les hommes-loups. Le chef des scribes sur tablettes en bois et les métallurgistes prennent un disque solaire. Les princes royaux prennent un DAG.SI et ils marchent³⁵. »

3.4. KBo 11.36 v 15-16 inventaire pour une fête religieuse CTH 523

« Treize pains *šaramna*- pour treize métallurgistes de la ville d'Arinna³⁶. »

3.5. La fête d'AN.TAH.ŠUM CTH 612 :

3.5.1. KBo 11.51 iv 6-7 : « Les métallurgistes apportent deux têtes de bovins en argent. Les porteurs de vaisselle en bronze apportent de la 'bière-vin' et les (= les récipients en forme de têtes de bovins) remplissent devant le roi³⁷. »

3.5.2. KUB 2.5 ii 33'-39' : « Le héraut accourt devant les métallurgistes. Les métallurgistes apportent deux têtes de bovins en argent. Un échanton habillé marche devant³⁸. »

3.5.3. VBoT 34 Vo 5-6 et KBo 23.77 iii 12' mentionnent également le métallurgiste dans des contextes lacunaires.

3.6. La fête du KI.LAM CTH 627 :

3.6.1. ABoT 5+ ii 10' et dupl. (Singer 1984 : 34) : « Les métallurgistes apportent deux têtes de bovins en argent. Le métallurgiste qui gagne prend de sa main deux pains *wagata*- et une mine d'argent du roi³⁹. »

3.6.2. KBo 20.33 Ro 10 (Singer 1984 : 89) : « Les métallurgistes apportent deux têtes de bovins (en argent). Ils versent deux récipients rouges de vin⁴⁰. Le responsable de la table emporte du pain *zippulašni*-. On donne au métallurgiste qui gagne une mine d'argent et deux pains *wagata*-⁴¹. »

3.6.3. KUB 20.4 i 19'-24' (Singer 1984 : 77) : « [Le roi se tient dans le bâtiment] *halentu*-. Le chef des fonctionnaires du palais amène le chef des métallurgistes [par son

2008 : 761-762. KUB 11.21a+ contient une erreur scribale qui peut être corrigée grâce aux duplicats : ^[URU] *Arinna INA paizzi* au lieu de ^{URU} *Arinna pāi* (vi 4'). Par ailleurs, vi 7' présente une 3^e pers. pl. (*parā panzi*) au lieu de la 3^e pers. sg. attendue (*parā paizzi* dans les duplicats).

³⁵ UGULA ^{LÚ.MEŠ}MUHALDIM ANA ^{LÚ.MEŠ}U[R.B]AR.RA *peran hūwāi* GAL ^{LÚ.MEŠ}DUB.SAR^{MEŠ}.GIŠ GAL ^{LÚ.MEŠ}SIMUG=*ya šittar harkanzi* DUMU^{MEŠ} LUGAL ^{GIŠ}DAG.SI^{HÁ} *harkanzi n=at iyantari*.

³⁶ 13 ^{NINDA}*šaramma[n]* ANA 13 ^{LÚ.MEŠ}SIMUG.A ^{URU}*Arinn[a]*.

³⁷ [^{LÚ.MEŠ}SIM]UG.A 2 SAG.DU GU₄ KÙ.BABBAR *udanzi* ^{LÚ.MEŠ}ZABAR.DAB [*par*]^{a?} KAŠ.GEŠTIN *udanzi* LUGAL=*aš peran šunnanzi*.

³⁸ *ta* LÚ ^{GIŠ}GIDRU ANA ^{LÚ.MEŠ}SIMUG.A *peran hūwai n=ašta* ^{LÚ.MEŠ}SIMUG.A 2 SAG.DU GU₄ KÙ.BABBAR *anda udanzi peran=(n)a* ^{LÚ}SAGI.A *waššanza iyattari*.

³⁹ [^{LÚ.MEŠ}SIMUG.A [(2 SAG.DU GU₄ KÙ.BABBAR *ud*)anzi ^{LÚ}SIMUG¹ (DÉ.E) [(*taru*hi kui)]š 2 ^{NINDA}*wagataš* 1 MA.[NA KÙ.BABBA]R LUGAL=*waš [(kiššaraz=š)]et dā[i]*.

⁴⁰ Alp 2000 : 69 suggère de traduire plutôt par « deux récipients de vin rouge » mais cela présenterait la particularité de placer le sumérogramme de l'adjectif avant le nom qu'il qualifie, ce qui n'est pas habituel : voir CHD L-N : 301-304.

⁴¹ [^{LÚ.MEŠ}SIMUG 2 SAG.DU GU₄ *udanzi* 2 DUG SA₅ GEŠTIN *lahuanzi* [^{LÚ} ^{GIŠ}]BANŠUR ^{NINDA}*zippulašne parā pēdai* [^{LÚ}S]IMUG¹ (DÉ.E) *tarahzi kuiš* 1 MA.NA KÙ.BABBAR Û 2 ^{NINDA}*wagadaš pianzi*.

manteau *šeknu-*]⁴². Le chef des métallurgistes donne [au roi] une lance de *cérémonie* [en fer. Le chef des métallurgistes] se prosterne devant le [ro]i (puis) il s'en va⁴³. » Ce passage est restitué à partir de celui qui suit immédiatement ici.

3.6.4. KBo 10.23(+) i 22'-34' et dupl. (Singer 1984 : 10) : « Le chef des métallurgistes porte une lance de *cérémonie* en fer. Le chef des fonctionnaires du palais saisit le manteau *šeknu-* du chef des métallurgistes et l'amène. § Le chef des métallurgistes va donner au roi la lance de *cérémonie*. Ensuite, il [= le chef des fonctionnaires du palais] le [= le chef des métallurgistes] ramène. Le chef des métallurgistes se prosterne devant le roi (puis) il s'en va⁴⁴. »

3.6.5. KBo 20.33+ Vo 47-53 (Singer 1984 : 91⁴⁵ et CHD P : 390) : « Les orfèvres viennent se tenir (là). Le roi boit assis en l'honneur de la divinité Hallara. Les orfèvres chantent [...]. § Les travailleurs du fer dispersent vingt boules de fer. Les travailleurs de l'argent dispersent vingt boules d'argent. Les travailleurs du cuivre créent (des objets en cuivre). Les hommes ... (les) *passent en revue*. Les hommes [...] ⁴⁶. »

3.6.6. KBo 10.31 iii 19'-20' (Singer 1984 : 103) : « Trois bœufs et quinze moutons ensemble avec leur peau : le chef des métallurgistes (les) prend⁴⁷. »

3.6.7. KBo 21.94 iv 1' mentionne également le métallurgiste dans un contexte lacunaire.

3.7. KUB 25.27 ii 21'-25' fête nuntarriyašha- CTH 629 (Nakamura 2002 : 76)

« Les métallurgistes célèbrent la divinité Antaliya. Ils (lui) d[onnent] un taureau et cinq moutons abattus en provenance du portail d'entrée. Les métallurgistes [donnent] en provenance de leur maison un taureau, deux moutons, deux mesures *PARISU* de farine (et) deux [récipients de bière KA.GAG]⁴⁸. »

⁴² Si la restitution d'I. Singer est correcte, le hittite indique : « prend le chef des métallurgistes quant à son manteau » (double accusatif).

⁴³ [nu LUGAL-uš ^É]halentiui tiēzzi [nu GAL DUMU^{MES}] É.GAL UGULA ^{LÚ.MES}SIMUG.A-in [^{TÚG}šeknun p]ēhutezzi UGULA ^{LÚ.MES}SIMUG.A-iš [LUGAL-i AN.BAR] šakuwannaš tūri pāi [nu UGULA ^{LÚ.MES}SIMUG.A-iš LUGA]L-i aruwaizzi [n=aš=kan parā] paizzi.

⁴⁴ UGULA ^{LÚ.MES}SIMUG.A AN.BAR šakuwannaš ^{GIŠ}SUKUR harzi nu GAL DUMU^{MES} É.GAL GAL ^{LÚ.MES}SIMUG.A ^{TÚG}šeknun ēpi n=an=kan anda pēhutezzi § [(nu)] paizzi GAL ^{LÚ.MES}SIMUG.A [(LUGA)]L-i šakuwannaš ^{GIŠ}SUKUR [p]āi namma=an EGIR-pa [(u)]watezzi nu GAL ^{LÚ.MES}SIMUG.A [(LUGAL)]-i hingazi [n=aš]=kan parā paizzi.

⁴⁵ Le joint avec KBo 34.2 signalé par le CHD n'est pas présent dans la translittération d'I. Singer.

⁴⁶ ^{LÚ.MES}KÙ.GI.DÍM.DÍM uenzi n=e tiēzi [LU]GAL-uš TUŠ-aš ^DHallaran [ekuzi] ^{LÚ.MES}KÙ.GI.DÍM.DÍM SİR^{RU} GAL-ri=ašta LU[GAL-i ...] § ^{LÚ.MES}AN.BAR 20 [pur]puruš AN.BAR šuhhanz[i] ^{LÚ.MES}KÙ.BABBAR 20 [pur]puruš KÙ.BABBAR šuhhan[zi] ^{LÚ.MES}URUDU.DÍM.DÍM šamnanzi ^{LÚ.MES}[...] x-ulumaš šamenzi ^{LÚ.MES}[...].

⁴⁷ 3 GU₄ 15 UDU^{HÁ} QADU KUŠ^{MES}=ŠUNU UGULA ^[LÚ.MES]SIMUG.A dāi.

⁴⁸ ^{LÚ.MES}SIMUG.A=ma=šmaš ^DAntaliyan iyanzi 1 GU₄.MAH 5 UDU IŠTU KI.LAM hūkanduš p[ianzi] 1 GU₄.MAH 2 UDU 2 PA Zİ.DA 2 [DUG KA.GAG] ^{LÚ.MES}SIMUG.A IŠTU É=ŠU[NU pianzi].

3.8. KUB 30.32 i 6-8 (et dupl.) fête purulli- à Nerik CTH 674 (Haas & Wäfler 1976 : 96)

« Les métallurgistes de la ville d'Arinna ins[tallent] les dieux dans le temple *hešta-*. Ils [prennent] un disque astral (et) tous les objets en argent et en or et ils les *takliya-*. Ils tiennent l'argent (et) l'or⁴⁹. »

3.9. KUB 58.33 iv 25'-27' fragment de fête religieuse à Nerik CTH 678 (Haas 1970 : 264)

« L'oïnt [prend] cinq peaux de bœuf. Le métallurgiste prend [une] peau de bœuf [...] ⁵⁰. »

3.10. KBo 20.3 iii 3'-5' et dupl. fête de Zippalanda et du Mont Daha CTH 635 (Neu 1980 : 45)

« En haut du temple du dieu de l'orage, ils placent devant l'autel dix pains de soldats d'un vingtième (de poids). Ils déposent *un demi* pain *wageššar* d'un dixième (de poids), neuf pains de soldats d'un vingtième (de poids) à côté du récipient *palhi-*. Le métallurgiste de la ville de Zippalanda place trois pains de soldats d'un vingtième (de poids) dans des bols⁵¹. »

3.11. IBoT 2.94 vi 7' fragment de texte décrivant une fête religieuse

« [Le chef des] scribes sur tablettes en bois et le chef des métallurgistes apportent de la *laine filée* et ils prennent le foyer (et le placent) devant. § Le chef des métallurgistes (la) donne au chef des scribes sur tablettes en bois. Le chef des scribes sur tablettes en bois (la) donne au chef des responsables de la table. Il (la) pend à la table⁵². »

3.12. Bo 3371 : 5-12 fragment de fête religieuse (Otten & Siegelová 1970 : 38 n. 18 ; Archi 1978 : 22 et CHD Š : 125)

« Le roi se tient près de la pierre *huwaši-*, au bâtiment des ablutions. Les métallurgistes créent (un objet de métal). Le métallurgiste qui gagne se prosterne (devant le roi ?). Le métallurgiste (qui arrive à la) seconde place se prosterne (à son tour) devant le roi. Quand les métallurgistes créent (un objet en métal), le roi fait signe des yeux aux fonctionnaires du palais⁵³. »

⁴⁹ LÚ.MEŠ⁵SIMUG.A URU⁵Arinna INA É⁵hešt[(ā DINGIR^{MEŠ} tia)nzi] šittaran UNUT^{HA} hūman ŠA KÙ.BABBAR [(KÙ.G)I danzi²] n=at EGIR-pa takliyanzi KÙ.BABBAR KÙ.GI [(appa)nzi].

⁵⁰ 5 KUŠ GU⁴ LÚ⁵GU^{DU}₁₂ [dāi 1] KUŠ GU⁴ LÚ⁵SIMUG [...] dāi.

⁵¹ [(šer^DIM-aš É-ri 10 NI)NDA.É(RIN.MEŠ 20-iš)] ištanaš pē[(ran tjanzi 1/2[?] NINDA⁵wageššar 10-li 9¹ NINDA.ÉRIN.MEŠ 20-iš^{DUG}p)]alhaš katta ti[(anzi 3 NINDA.ÉRIN.MEŠ 20-iš^{LÚ}SIMUG.A URU⁵Zipl)]anda GAL^{HA}-aš dā[(i)]. Pour la traduction de 20-iš, voir Eichner 1992 : 89.

⁵² [UGULA^{LÚ}D]UB.SAR.GIŠ=kan UGULA^{LÚ.MEŠ}SIMUG=ya [m]alkeššar anda pēdanzi GUNNI-an=kan peran danzi § nu UGULA^{LÚ.MEŠ}SIMUG ANA GAL DUB.SAR.GIŠ piškizzi GAL^{LÚ.MEŠ}DUB.SAR.GIŠ=ma ANA UGULA^{LÚ.MEŠ}GIŠ⁵BANŠUR peškizzi ta^{GIŠ}BANŠUR-az gankiškizzi.

⁵³ LUGAL-uš^{NA4}hūwašiya É⁵tarnū[i] tiyazi ta^{LÚ.MEŠ}SIMUG¹ (DÉ.E) šammanānz[i]^{LÚ} SIMUG¹ (DÉ.E) tarahzi kuiš UŠG[EN] tāt pēdaš=(š)a^{LÚ} SIMUG¹ (DÉ.E) LUGAL-i UŠGEN mān^{LÚ.MEŠ} SIMUG¹ (DÉ.E) šammanānzi LUGAL-uš^{MEŠ} ANA DUMU^{MEŠ} É.GAL IGI^{HA}-it iy[azi].

3.13. *KBo 37.1+ ii 9-13 rituel de fondation bilingue hatto-hittite CTH 726 (Schuster 2002 : 156-159 et Klinger 1996 : 640-641)*

« Elle [= la déesse Kamrušepa] appela le puissant métallurgiste : ‘Viens les prendre, les clous en fer et le marteau en cuivre ! § Prends-le, le ... en fer, fends la terre !’⁵⁴ »

4. Textes relatifs à des rituels syriens

4.1. *KUB 58.109+ i 15'-21' et dupl. rituel d'Allaiturahhi CTH 780 (Haas & Wegner 1988 : 85-86 et Savaş 2006 : 65)*

« Le serviteur du commanditaire du rituel emporte un pain aigre dans la maison du métallurgiste. Il le donne au métallurgiste. Il lui achète de l'argent, de l'or, du fer, de l'étain, du plomb, du *lulluri*, du lapis-lazuli, de la *cornaline*, du *quartz*, de la pierre de Babylone, de la pierre *parašha*-, un peu de chaque, contre du pain. Il les scelle *en présence* du métallurgiste et les emporte à la maison⁵⁵. »

5. Autres textes

5.1. *KUB 38.37 iii 16-20 compte rendu de procès CTH 295 (Werner 1967 : 56-57)*

« Ainsi (parle) Warwašazi : la déesse Soleil d'Arinna : une statue féminine. Le dieu de l'orage d'Arinna : une statue masculine. (Propriété) de notre père. Je leur fais régulièrement des offrandes. Mais Piha-muwa, le chef des métallurgistes, a produit l'argent de(s) divinité(s)⁵⁶. »

⁵⁴ version hattie – col. de gauche (i) 11-13 : a=n=zar=aš=ma ure=š huzzaššai=šu an=a=miš=a hapalki=an kurkupal šinit[e-...] iš=kinawar mu=wakkupakku § miš=a hapalki=an ka=la=pupišet ka=mar ištarrázil : version hittite – col. de droite (ii) 11-16 : [n]u=za halzaiš^{LÚ} SIMUG.A innarauwandan ehu=uš=za dā ŠA AN.BAR^{GIŠ} GAG^{HÁ} URUDU-aš^{GIŠ} NÍG.GUL § dā=ma=an=za AN.BAR-aš xxx nu iškalli daganz[ipan]. L'analyse grammaticale du hattî suit celle de Soysal 2004.

⁵⁵ [(nu)] İR EN.SISKUR 1 NINDA EMŠU INA É^{LÚ} SIM[(UG.A pēdai n=an)] A[(N)]A^{LÚ} SIMUG.A pāi nu=(š)š[(i=kan KÙ.BABBAR KÙ.GI AN.BAR NAGGA A.BAR lu)]l[(ur)]i^{NA4} ZA.GİN^{NA4} GUG [(^{NA4}DUH.ŠÚ.A^{NA4} KÁ.DINGIR.RA^{NA4} p)]ar[(u)]šhaš kuitta tep[(u n=at NINDA-it wāši n=a)]t=kan ANA^{LÚ} SIMUG.A and[a (šiyaizzi n)]=at parna pēdai.

⁵⁶ UMMA¹ Warwašazi^D UTU^{URU} TÚL-na=wa ALAM MUNUS⁷⁷ D^U URU^U TÚL-na=ya ALAM LÚ ŠA ABU=NI nu=war=aš=za šippanzakimi KÙ.BABBAR=ma=wa ŠA DINGIR^{LIM1} Piha-A.A UGULA SIMUG.A iyat.

LES OBJETS EN MÉTAL D'EMAR (AUJOURD'HUI MESKÉNÉ), UNE VILLE DE SYRIE DU NORD SOUS DOMINATION HITTITE AU BRONZE RÉCENT : quels courants d'influence ?

Isabelle Weygand*

Abstract

The city of Emar is located along the Euphrate River where several civilizations have come in contact, some originating from the Levant region and Mesopotamia and others even from the Hittite Empire which ruled during the Late Bronze Age.

My research deals with the kind of cultural influences that can be found at Emar by studying the commercial routes as well as the metal artifacts excavated on the site and dating back to the end of Late Bronze Age

INTRODUCTION

La ville d'Emar du Bronze moyen est citée dans les textes de Mari, cependant, c'est celle du Bronze récent qui a été dégagée par l'équipe Jean Margueron¹, entre 1972 et 1976. Puis, à partir de 1996, une équipe syro allemande² a repris les fouilles en dégageant, dans certains secteurs, des niveaux plus anciens datant du Bronze moyen et même ancien. La ville d'Emar de l'âge du Bronze récent a déjà fait l'objet de nombreuses publications³ de la part de chercheurs de nationalités diverses. Cette ville, qui a été détruite en 1187 avant J.-C., était placée sur le coude de l'Euphrate, à un endroit de rupture de charge pour les transports et à la croisée des routes commerciales. Elle se trouvait aussi à la croisée d'influence des civilisations de Syrie, de Mésopotamie et d'Anatolie. Au Bronze récent,

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¹ A cette époque, professeur à l'université de Strasbourg. Une équipe pluridisciplinaire à composante fortement strasbourgeoise, composée d'étudiants de J. Margueron, des architectes issus de l'Ecole d'architecture de Strasbourg, mais aussi des conservateurs Antiquités Orientales Musée du Louvre D. Beyer et A. Caubet, l'épigraphiste Daniel Arnaud, et aussi des géographes. Elle a succédé à l'équipe d'André Raymond qui a fouillé les vestiges d'époque byzantine (ville de Balis-Meskéné) et d'époque ayyoubide. Les fouilles de sauvetage ont été menées dans le cadre d'un projet Unesco, suite à la construction d'un barrage sur l'Euphrate, et de découvrir les vestiges antiques, avant leur immersion par le lac Assad.

² Direction Uwe Finkbeiner, université de Tübingen, avec l'appui, du côté syrien, des personnalités suivantes : M. Sultan Muhesen, directeur de la Direction Générale des Antiquités à Damas, M. Shawki Sha'ath, directeur du département des antiquités d'Alep et de M. Farouk Ismail, université d'Alep. Cinq campagnes de fouille ont été menées, jusqu'en 2002. Le matériel de cette mission, qui est daté de l'âge du Bronze, est en cours d'étude.

³ En premier, les rapports préliminaires et articles de Jean Margueron, la publication des textes par Daniel Arnaud, épigraphiste, les articles d'Emmanuel Laroche, Mirjo Salvini et Marie-Claude Trémouille pour les textes hittites ; la publication des sceaux par D. Beyer. Par la suite, une grande quantité d'autres articles ont été publiés, par des chercheurs américains, italiens, allemands ; un colloque a été organisé récemment à Constance en 2006. Pour la bibliographie consacrée à Emar, voir sur le site de l'Université de Tübingen : www.unituebingen.de/emar/en/news.html

elle est dominée politiquement par les Hittites, surtout depuis l'intervention du roi Suppiluliuma et de son fils Mursili II⁴. Les tablettes d'Emar sont rédigées en trois langues différentes : l'akkadien local domine, mais on trouve aussi des textes en hittite et d'autres en langue hourrite⁵. D'après Gernot Wilhelm⁶, les Hourrites, se seraient infiltrés en Syrie du nord à partir de la fin du troisième millénaire dans les montagnes d'Anatolie de l'est, et ils se seraient intégrés à la Syrie au courant du deuxième millénaire, tout en apportant leurs traditions.

Dans quelle mesure les objets en métal d'Emar⁷ reflètent-ils ces croisements d'influence et dans quelles proportions ?

1. Quels types de métaux ont été trouvés à Emar, quelle est leur origine et quels itinéraires de commerce étaient empruntés ?

Le site de Meskéné-Emar a livré un total de 256 objets en métal⁸. Le plus souvent, ils ont été retrouvés en mauvais état, à cause d'une forte corrosion ; cependant, une vingtaine d'entre eux a été restaurée en France, au Musée du Louvre. De quel métal s'agit-il et quelle est sa composition ? La grande majorité des objets est en bronze ou en cuivre, très peu sont en argent, en or ou en plomb. Néanmoins, il est difficile de préciser s'il s'agit de bronze ou de cuivre⁹ car seulement 9 objets ont été analysés par le Laboratoire de Recherche du Musée du Louvre¹⁰.

Que révèle ces travaux, quelle est la composition du métal de ces derniers ? (fig. 1)

Pour les objets datant du Bronze récent, on constate, le plus souvent, qu'il s'agit de cuivre presque pur avec de faibles pourcentages d'arsenic ou d'autres impuretés. C'est

⁴ Au nouvel empire hittite, aux XIV-XIII^e siècle avant J.-C.

⁵ Exemples de tablettes écrites en langue hittite en signes cunéiformes, voir Laroche 1982 : 54, figures 1a et 1b ; en hiéroglyphes hittites, Laroche 1983. Tablette écrite en langue hourrite, Laroche 1982, : 59, figure 9. Tablette écrite en akkadien, Arnaud 1986 : n°23, Msk 73276, archives de la maison A V, remboursement partiel d'une dette par Tattašše.

⁶ Wilhelm 1996 : 176-177, les Hourrites auraient été présents en Syrie peut-être déjà vers la « période de Kültepe », c'est-à-dire au Bronze moyen ; d'autre part, même si la langue hourrite est toujours difficile à déchiffrer, il signale l'existence d'une racine verbale hourrite (*tab/v*) qui signifie « couler (du métal) » avec ses formes dérivées (*tabiri* « quelqu'un qui a coulé » et *tabrenni* « forgeron », cela prouve l'importance du métal pour ce peuple.

⁷ Ce travail concerne uniquement les objets en métal trouvés par la mission J. Margueron ; il intervient, malheureusement, avant la publication du volume *Emar matériel* dans lequel le même auteur a conduit l'étude des objets en métal d'Emar. Je tiens à exprimer ici ma reconnaissance à J. Margueron de m'avoir confiée l'étude du matériel métallique d'Emar. Mes remerciements s'adressent aussi à Anne Horrenberger, qui a assuré la composition des illustrations et réalisé certains des dessins d'objets, ainsi qu'à l'équipe des dessinateurs suivants, Gudrun Anselm, Olivier Callot, Jean Dufour, Marie-Claude Nierlé, Patrick Weber et Caroline Florimont (Musée du Louvre).

⁸ Auxquels s'ajoute 26 objets dégagés sur le site de Faq'ous, proche du site de Meskéné-Emar, donc un total de 283 objets en métal pour les deux sites. Ce sont les objets du site d'Emar qui sont l'objet de ce travail. La plupart d'entre eux sont conservés en Syrie au Musée d'Alep. Une convention Unesco ayant prévu un partage des objets entre les deux pays, 65 d'entre eux sont conservés au Musée du Louvre à Paris où une vitrine leur est consacrée.

⁹ D'où l'incertitude et le choix de l'appellation « cuivre ou bronze » pour la majeure partie d'entre eux dans la publication de Weygand, *Emar matériel*, en attente de publication.

¹⁰ Analyses réalisées en 1981 par MM. Menu et Hurtel, Laboratoire d'Analyses du Musée du Louvre.

le cas, par exemple, du burin 24¹¹, du matoir 32, de la pointe de javeline 175 et de la barre 224 ; ils ont été dégagés dans la couche du Bronze récent. La composition du métal de la pointe de javeline 175 se révèle comme étant un peu particulière¹² : on observe la présence de nickel (1,86 %) dont le pourcentage est plus important que pour celui des autres objets, il est allié à un faible pourcentage d'antimoine. Cet objet a été trouvé dans le locus 3 d'une maison près du temple M2. En outre, le burin 24 comprend des impuretés caractéristiques : en effet, il est caractérisé par une teneur plus importante en cobalt que pour les autres objets, ainsi que par une faible teneur en fer et en nickel (moins de 1%). Ces particularités s'expliquent vraisemblablement du fait que cet objet provient d'une couche antérieure au Bronze récent : en effet, il a été dégagé dans les terres de remblai, au fond du sondage sous la cella du temple M1. L'épingle en cuivre 7, est ornée d'une double tête d'équidés placés dos-à-dos, elle se distingue par un alliage quaternaire avec une nette prédominance de plomb (17,7%) et un pourcentage élevé de zinc (7,86%), ce qui est rare pour les objets du Bronze récent. Notons qu'elle a été mise au jour dans une couche de surface près du chantier D (maisons). Le poignard 185 est clairement en bronze car il est formé d'un alliage binaire de cuivre et d'étain, un type de composition bien connu depuis le troisième millénaire (premier prélèvement : 89,90% de cuivre et 9,16% d'étain ; deuxième prélèvement : 93,54% de cuivre et 5,56% d'étain). Il a été retrouvé dans la couche de destruction datée du Bronze récent (carré 35, futur chantier M). Enfin, les trois bijoux en cuivre, retrouvés dans une tombe islamique A-VII NE T 2 (bracelet 83, bagues 98 et 99), sont caractérisés par un alliage quaternaire (cuivre, zinc, plomb et étain), avec un fort pourcentage en zinc (13,4 à 16,2%), un type d'alliage souvent attesté pour la période islamique. La présence de l'étain peut s'expliquer par une refonte d'objets.

Ainsi, sur les 9 objets qui ont été analysés, tous sont en cuivre, sauf un seul, le poignard 185. On peut donc supposer qu'il en était ainsi pour la majorité des objets d'Emar, mais cela reste une hypothèse.

Y avait-il des ateliers de métallurgistes à Emar ou bien les objets étaient-ils tous importés ? Les fouilles n'ont révélé aucune trace d'atelier, aucun moule n'a été retrouvé, dans l'état actuel des connaissances¹³. D'où provenait le métal découvert à Emar et quels itinéraires étaient empruntés au Bronze récent pour le commerce des métaux ?

De quelles régions provenait le métal utilisé à Emar au Bronze récent ?

Selon J.-M. Durand¹⁴ Emar, au Bronze moyen, était un véritable « noeud occidental de circulation et de commerce ». En effet, les tablettes de Mari attestent que les circuits commerciaux étaient développés entre Emar et Mari, les échanges se faisant la

¹¹ Les numéros apposés aux objets dans cet article sont ceux qui ont été choisis dans le catalogue de l'étude du matériel métallique, voir Weygand, *Emar matériel*, ouvrage collectif à paraître.

¹² Selon MM. Menu et Hurtel.

¹³ La mission archéologique allemande (direction U. Finkbeiner) aurait-elle trouvé des indices de travail métallurgique sur le site ?

¹⁴ Durand 1990 : 39-40, 86-89.

voie principale, depuis Carchémish, en passant par Emar et jusqu'à Mari à l'aller et au retour, c'est-à-dire la voie de l'Euphrate, bien qu'une route du désert soit attestée pour les plus aventureux. Ce même auteur précise qu'après avoir franchi le passage¹⁵ de la ville d'Emar, les marchands « continuaient leur route soit vers la région d'Ougarit – qui était manifestement à cette époque le port syrien desservant Chypre et la Crète¹⁶ – ou vers le pays de Canaan », donc des destinations lointaines. Qu'en était-il au Bronze récent ?

Le commerce lointain depuis la ville d'Emar est mentionné dans les archives d'une maison du chantier A¹⁷ : en effet, sur deux des tablettes, il est question d'un couple de marchands qui font le commerce de vêtements syriens entre la Babylonie et Emar. Le marchand s'appelle Alaziai¹⁸ (ou Alaša, d'après Durand), donc un homme originaire de Chypre qui possède des champs à Emar. Sa femme porte le nom de Tattašše, un nom hourrite, traduit dans la graphie babylonienne par Ra'indu, l'« aimée ». L'une de ces tablettes est une lettre adressée par Alaziai à sa femme qui se trouve visiblement dans leur maison à Emar, alors que lui-même est, au même moment, dans une autre ville en Babylonie ; Arnaud en déduit que sa femme s'occupe des affaires commerciales en son absence. Le contenu de ces deux tablettes prouve l'existence d'un commerce lointain entre la ville d'Emar et la Babylonie et même probablement Chypre, d'où est originaire le marchand. Il témoigne ainsi des activités commerciales d'Emar au Bronze récent et semble confirmer ce rôle de la ville, déjà constaté pour l'époque du Bronze moyen. En outre, il montre son aspect cosmopolite à travers ce couple de marchands, lui d'origine chypriote, elle d'origine hourrite, et, semble-t-il, bien établis à Emar.

Quels itinéraires étaient utilisés pour le commerce du métal utilisé à Emar au Bronze récent ?

Durand et Joannès¹⁹ nous apprennent qu'au Bronze moyen, les marchands d'Emar se déplaçaient jusqu'à Shubat Enlil pour acheter l'étain ou jusqu'à Mari pour acheter le bronze : en dépit des frais occasionnés par le trajet, cela leur revenait moins cher de

¹⁵ Durand 1989 : 184, signale l'absence de pont sur l'Euphrate à Emar, le transport était assuré par des passeurs appelés les *malahhu*.

¹⁶ Durand 1990 : 40 notes 2 et 3. L'auteur souligne la mention de la ville *Alašia* dans un fragment de tablette (note 2) ; il mentionne aussi le texte jadis publié par Dossin, ARMT XXIII, 556 à la fin duquel il est question de l'étain pour le prince de Crète (*kap-ta-ra-i-im*).

¹⁷ Ce texte fait partie d'un lot de 7 tablettes qui sont les archives de ce couple émarite ; elles étaient contenues dans une jarre découverte sur le sol d'une maison du chantier A (AV). L'un des contrats porte d'ailleurs un nom de personnage qui donne la date de destruction de la ville d'Emar (avant la fin de la deuxième année de *Melišihu*), c'est-à-dire en 1187.

¹⁸ Arnaud 1986 n° 23 (MSK 73276 et MSK 73277), n°25 (MSK 73280) : 34-36. Arnaud 1977 : 25. Arnaud 1975 : 88, traduit Tattašše, mot d'origine hourrite, par l'« aimée » et où il précise que l'on pourrait traduire Alaziai par le « Cypriote », cependant la présence du z et non du sh rend, selon lui, l'« hypothèse hasardeuse ». Voir aussi la relecture du nom propre du marchand *Alaziai* par Durand 1989 : 177-191. Ce dernier remarque qu'il faut bel et bien lire *Alaša* ou *Alašiu* à la ligne 1 de la tablette n° 23. Voir aussi Durand 2003 : 28-29 où il mentionne le marchand *Alašay*, le « Chypriote ».

¹⁹ Selon Durand 1990 : 83. Texte A 2455, rapport d'un fonctionnaire mariote : les marchands d'Emar venaient acheter l'étain à Shubat Enlil car il coûtait moins cher qu'à l'étape suivante en allant vers le nord-ouest sur l'Euphrate. Durand 1990 : 83 note 217, précise le « doublement du prix de l'étain entre Mari et les régions occidentales ». Enfin, Durand 1990 : 84 note 218, ajoute que les marchands d'Emar viennent acheter du bronze à Mari. Voir aussi Joannès 1996 : 324-333 (325 : carte des routes et itinéraires).

procéder ainsi. L'étain provenait principalement d'Afghanistan et du Golfe persique, il faisait l'objet d'un commerce vers la Mésopotamie, en étant transporté sur le fleuve Euphrate ou bien à dos d'âne. Sous Zimri Lim, la ville de Mari le redistribuait à d'autres cités vers le nord-ouest, par exemple à Alep, à Carchémish et aussi à Emar. Par contre, le cuivre était importé de Chypre où les mines étaient nombreuses ou bien de même de Turquie, et le sens du commerce se faisait donc d'ouest jusqu'à l'Euphrate. Ceci correspond à l'hypothèse traditionnelle des voies de commerce des principaux métaux. Cependant, qu'en était-il au Bronze récent ?

Cependant, depuis une vingtaine d'années des prospections ont eu lieu en Turquie, dans le but de localiser les sites miniers et de dater leur utilisation. Beaucoup d'articles ont été publiés sur les objets en métal avec l'analyse de leur composition. Ces travaux montrent que l'on avait sous-estimé les richesses minérales d'Anatolie et même leur exploitation dès le III^e millénaire.

Selon K. Aslihan Yener, il existait un commerce intense de métaux (plomb, argent, et du plomb contenant du cuivre) qui provenait non seulement des montagnes du centre sud du Taurus (Anatolie), – en particulier de la vallée de Bolkardağ ou de la région de Çamardı avec les mines d'étain de Kestel/Göltepe²⁰, situées non loin du gisement de Bulgar Maden – mais aussi des mines de la région de la chaîne pontique, localisées plus au nord (fig. 2)²¹. S'appuyant sur ses propres travaux et ceux d'autres savants, Aslihan Yener²², insiste sur l'activité intense de la mine d'étain de Kestel, au centre sud de l'Anatolie et sur la complémentarité de Kestel avec le site de Göltepe, où était travaillé ce minerai, et qu'elle définit comme ayant été un véritable centre industriel dès le Bronze ancien. Selon cet auteur, les hautes terres d'Anatolie étaient connectées aux basses terres pour le commerce du métal pendant le Bronze moyen. En outre, dès le début du second millénaire, d'autres régions, riches en étain, comme le Turkménistan et l'Afghanistan, étaient en compétition avec les mines de Kestel ; d'ailleurs, les mines du massif du Taurus semblent avoir toujours été en activité pendant la période du Bronze récent²³. A l'appui de ces affirmations, elle cite l'exemple de quelques objets trouvés en fouille, dont le métal a été récemment analysé, et qui prouve que ce métal provenait des mines du Taurus. Par exemple, c'est le cas d'un creuset découvert à Alalakh²⁴ en 2003. La même provenance est révélée par les analyses récentes des isotopes des métaux d'un échantillon

²⁰ La vallée de Bolkardağ (mines d'étain) se trouve dans le massif du Taurus, à environ 50 km de la côte méditerranéenne et au nord-ouest de la ville de Tarse ; la région de Çamardı, à 80 km au nord de Tarse, est proche de Niğde, elle inclut les mines d'étain de Kestel et le site de Göltepe. A Göltepe, situé à 2 km de la mine, le métal était travaillé dès le troisième millénaire. Selon Yener et col. 1998, les mines de Bulgar Maden (plomb argentifère) ne sont situées qu'à une dizaine de kilomètres du site de Porsuk-Ulukışla, proche de Niğde et à une quarantaine de kilomètres des Portes de Cilicie, voir sur la carte.

²¹ Les gisements miniers sont figurés sous forme d'étoiles ; sous forme de flèche, les courants d'échanges de minerais.

²² Des fouilles ont eu lieu dans les mines d'étain de Kestel et aussi à Göltepe, Yener 2008 : 58-61. Gülçür 2005 : 14-16. Kurcayırılı & Özbal 2005 : 183. Pulak 2000, entre 9 et 10 tonnes de cuivre étaient contenues dans l'épave, le poids des lingots d'étain n'est pas précisé. Voir aussi Pulak 1988 : 137-157.

²³ Yener 1995, révisé 2007, fin de l'article, « Middle Bronze Age and Late Bronze Age Artifacts ».

²⁴ Yener 2008 : 61-62. Le métal contenu dans ce creuset provient du Taurus.

d'objets²⁵ dégagés dans divers sites d'Anatolie, de Syrie du Nord et d'Assyrie : un élément d'armure inédit découvert à Tell Tayinat (plaine de l'Amuq) daté du Bronze récent ; un objet en argent mis au jour à Tell el-Qitar (mine d'Aladağ, dans le Taurus) ; l'épingle en plomb de Tell al Rimah en Syrie datée de 1500 av. J.-C. et l'objet de plomb d'Assur daté de 1300 av. J.-C. montrent une interaction avec l'Anatolie du sud-est. Et pourtant, souligne l'auteur, cette région était une zone de grand conflit pendant la période hittite. D'autre part, l'analyse des lingots d'étain découverts dans l'épave du bateau ayant coulé à Uluburun, près de Kaş (sud-ouest de la Turquie, voir la carte) indique qu'ils proviennent des mines du Taurus. Cette épave, datée du Bronze récent, contenait non seulement des lingots d'étain et de cuivre²⁶, mais aussi des objets témoignant clairement d'un commerce international lointain entre les pays du Levant, l'Égypte, l'Anatolie, Chypre et le monde grec. Selon Gülçür²⁷, à Boghazköy, seul un lingot de type *keftiu* est connu ; pourtant, dans les textes, est mentionné du cuivre provenant d'Alasia de Chypre. Deux autres chercheurs, Kuruçayırılı et Özbal confirment que l'analyse du métal des objets provenant de sites de Cilicie, par exemple de Tarse, donne comme résultat de provenance les mines du centre de la chaîne du Taurus, Bulgar Maden (argent, cuivre, étain) ou Kestel (étain). Selon eux, la Cilicie a dû jouer un grand rôle de transition dans le commerce entre l'Anatolie et la Syrie du nord ou la Mésopotamie.

Analysant le matériel d'Alalakh, Aslıhan Yener²⁸ suggère aussi que les échanges entre cette ville et les royaumes d'Anatolie centrale, comme Kanesh, existaient dès le Bronze moyen, avant même l'arrivée de Hattusili I^{er} au XVI^e siècle. De plus, si l'on en croit Tuba Ökse²⁹, les voies commerciales reliant le centre de l'Anatolie à la Syrie du nord étaient déjà très diversifiées et constamment utilisées, dès le milieu du troisième millénaire.

Enfin, Mehmet Işıklı³⁰, chercheur de l'Université d'Erzurum, se fondant à la fois sur les prospections minières récentes et sur l'analyse d'objets archéologiques, affirme que l'Anatolie du nord-est (la région de Kars et Erzurum, elle-même en relation avec la Transcaucasie), constituait une autre source importante de minerais (cuivre, plomb, zinc) au Bronze moyen et au Bronze récent. Işıklı émet l'hypothèse qu'il aurait existé une route commerciale nord-sud depuis l'Anatolie du nord-est jusqu'en Mésopotamie³¹. Ella Dardaillon³² confirme qu'au Bronze moyen, la ville de Ras Shamra-Ugarit utilisait le plus souvent des minerais provenant de Chypre et des mines de cuivre d'Anatolie du nord-est (Ergani Maden). Par contre, elle signale qu'au Bronze récent, l'approvisionnement en

²⁵ Yener 1995, révisé en 2007, dernière partie de l'article, photo de l'élément d'armure de Tell Tayinat.

²⁶ L'épave contenait 10 tonnes de cuivre.

²⁷ Gülçür 2005, « cuivre d'Alaşa, de la montagne Tagatta », mention exacte du texte non citée : 15.

²⁸ Yener 2007 : 151-158.

²⁹ Ökse 2007 : 35-42.

³⁰ Işıklı 2008 : 99-118. Voir la carte des gisements miniers, issue de la prospection MTA : 115, fig 1.

³¹ Cependant l'auteur précise qu'il s'agit là d'une hypothèse qui reste à confirmer par des analyses systématiques des objets en métal issus des fouilles archéologiques.

³² Dardaillon, 2008 : 164-165. Auteur d'une thèse soutenue en 2006, à paraître, Dardaillon, E. *Les productions métalliques dans les royaumes de Levant au II^e millénaire av. J.-C.*, Université Louis Lumière Lyon 2.

cuiivre se faisait soit à la mine grecque du Laurion, soit aux mines de Chypre. Il semble qu'avec la multiplication des échanges, la provenance des minéraux était devenue plus variée.

Ainsi, il apparaît qu'au Bronze récent, les voies commerciales concernant le métal, étaient beaucoup plus complexes et diversifiées qu'on ne le croyait traditionnellement, comme l'indiquent les flèches sur la carte présentée ici (fig. 2)³³. Le métal utilisé à Emar, une ville située plus à l'intérieur des terres qu'Ugarit, a pu provenir d'Anatolie du centre (Bulgar Maden), en transitant par les portes de Cilicie, via Carchémish ou bien depuis la région du nord-est de l'Anatolie (Ergani Maden) via Tell Brak (?) pour l'étain et le cuiivre ou bien même depuis la zone de la chaîne pontique. Cela n'exclut pas, bien sûr, une provenance depuis la voie traditionnelle : celle provenant du sud-est, c'est-à-dire par la voie de l'Euphrate ou bien de l'ouest pour le cuiivre provenant de Chypre, ou même de Crète³⁴ (?), selon les époques et le contexte politique³⁵.

2. Quels courants d'influence peut-on discerner dans la production des objets en métal d'Emar au Bronze récent ?

Dans quelle mesure les habitants d'Emar avaient-ils intégré les cultures différentes, celle des Hourrites, des Hittites, des Mésopotamiens, et des régions du Levant ? Cette étude s'appuie sur l'analyse comparative d'un échantillon d'objets en cuiivre ou bronze datant du Bronze récent.

La statuette anthropomorphe (fig. 3)

Cette statuette (200)³⁶ en bronze ou cuiivre est presque complète. Elle faisait partie d'un lot d'objets intégrés dans des débris effondrés sur la banquette située dans la partie ouest de la cella du temple de Ba'al. Dans ces débris, très proches du niveau du sol, se trouvaient aussi trois bovinés en bronze ou cuiivre³⁷. L'ensemble des objets était manifestement tombé de plus haut, peut-être d'une étagère, lors de la destruction du temple.

Le corps de cette statuette, à l'exception de ses bras, a vraisemblablement été moulé en un morceau à la cire perdue³⁸. La statuette est de forme trapue, ses bras

³³ En rouge les voies d'échanges connues depuis longtemps, en jaune celles qui ont été découvertes plus récemment.

³⁴ Il n'y a pas de preuve de contact dans les textes entre les marchands d'Emar et la Crète au Bronze récent, cependant il y en a une, selon Durand 1990, entre Mari et la Crète au Bronze moyen, voir plus haut.

³⁵ Une hypothèse qui, dans l'idéal, devrait être approfondie, si davantage d'objets d'Emar pouvaient être analysés, par exemple ceux conservés au Musée d'Alep (statue anthropomorphe, taureau, éléments armure, situle). Peut-être les objets en métal de la fouille Finkbeiner à Emar ont-ils fait l'objet d'analyses ?

³⁶ Dimensions : hauteur totale = 15,8 cm ; largeur = 3,3 cm (torse) ; épaisseur = 1,6 cm (torse).

³⁷ Le bovidé complet 201, et les bovinés fragmentaires 202 et 203.

³⁸ Il n'a malheureusement pas été possible à l'auteur de réexaminer cette statue ni les autres objets métalliques conservés en Syrie.

rapportés³⁹, aujourd'hui disparus, devaient être soit en cuivre ou en bronze, soit dans un autre matériau. Quelle était leur position initiale ? En raison de la ligne des épaules, la position du bras gauche semble *a priori* plutôt pouvoir avoir été brandi vers le haut, le bras droit étant placé vers l'avant plus ou moins à l'horizontale. En effet, l'épaule gauche de la statuette d'Emar est légèrement surélevée. Une incertitude subsiste cependant, car en comparant avec d'autres statuettes, on s'aperçoit qu'il existe des variantes du geste du bras gauche. Examinant les deux statuettes en métal des musées de Gaziantep et d'Adana, Özgen et Summers⁴⁰ notent que l'épaule gauche de la statuette d'Adana est légèrement surélevée, alors que les deux bras sont avancés et situés à la même hauteur. On peut en déduire que celle d'Emar avait peut-être aussi les deux avant-bras placés à l'horizontale. D'ailleurs, beaucoup d'autres statuettes, découvertes dans la plaine de l'Amuq, en Syrie ou au Liban⁴¹ ont les deux avant-bras parallèles, placés vers l'avant et à l'horizontale. L'incertitude subsiste sur la restitution de la position initiale des bras. La statuette d'Emar est vêtue d'un pagne court, décoré de deux lignes horizontales incisées encadrant un motif en zigzag. Ce pagne a été façonné séparément, puis appliqué et incisé. Les yeux, dont les creux sont bien marqués, étaient probablement incrustés de bitume, de lapis-lazuli ou de métal précieux. Le personnage est barbu et coiffé d'un bonnet de forme conique, à la base duquel se trouve une paire de cornes, ce qui affirme sa divinité. Il est debout, quelque peu déhanché vers sa droite et sa jambe gauche est légèrement engagée vers l'avant. La statuette était initialement fixée sur une base⁴² en métal ou dans un autre matériau, puisque l'on observe qu'un tenon a été prévu sous chacun de ses pieds.

Quelle divinité est représentée ici ? Malgré l'incertitude de la position de ses bras, ce qui reste de cette statuette et aussi le contexte de sa découverte⁴³, permettent de l'identifier au dieu de l'Orage, c'est-à-dire le dieu Ba'al, très populaire en Syrie et à Emar⁴⁴. Si le taureau, son animal attribut, est très rarement associé au personnage

³⁹ Exemples d'autres statuettes à bras rapportés, Seeden 1980 : pl. 105, 1738 (Doğantepe), 1739 (Syrie du Nord) et 1740 (près de Sidon ; cette dernière statuette aurait été désignée par erreur comme provenant de Bogazköy par Bittel 1976 : 227, n° 262 ; voir à ce sujet Bisi 1998 : 279 et note 29). A Kamid el Loz, Metzger et Barthel 1993 : 271 et pl. 21, 272 et pl. 23.

⁴⁰ Özgen et Summers 1993 : 110. Voir aussi Summers 1991, fig. 1 : sur la statue complète conservée au musée d'Adana (hauteur totale 21, 6 cm), on observe que les deux avant-bras sont à l'horizontale alors que la jambe gauche est dégagee vers l'avant (Özgen et Summers 1993 : pl. XV), alors que sur la statuette conservée au musée de Gaziantep (hauteur 17, 4 cm), le bras gauche est légèrement relevé par rapport à l'autre. D'autre part, le bras gauche de la statuette provenant d'Aktepe datée du XIVe-XIIIe s avant J.-C (voir Özgüç 1999 : 28), est à l'horizontale, alors que son bras droit est levé, ce qui constitue une exception dans la série des statuettes de type *Smiting God*. Ainsi, en complément des deux types cités par Bisi 1998 : 275, on constate qu'il existe beaucoup plus de différentes positions de bras qu'on l'avait supposé au départ ; en particulier, il existe deux variantes de position du bras gauche sur cette série de statuettes ayant les deux bras situés proches de l'horizontale.

⁴¹ Statuettes de Tell Judeideh, Braidwood et Braidwood 1960, : pl. 56 et suivantes. Seeden 1980 : pl. 1/1, pl. 1/2, pl. 2/3 (Judeideh) ; pl. 2/4 (près de Saida) ; pl.3/ 5 et 6 (Syrie) ; pl. 4 (Liban).

⁴² A Byblos, des bases en pierre calcaire ou en marbre ont été retrouvées, Seeden 1980, pl. 117, la plupart sont rectangulaires, quelques unes sont circulaires. Des bases planes et rectangulaires en métal sont partiellement conservées sous les statuettes d'Adana et Gaziantep, Özgen et Summers 1993 : 109 et pl. XV.

⁴³ Elle a été découverte dans le temple de Ba'al. Le temple sud a été identifié comme étant celui du dieu Ba'al, puisque la mention de ce dieu existe sur trois tablettes qui y ont été trouvées (Arnaud 1986 : n°42, n°45, n°52) ; Fleming 1992 donne son accord pour cette identification : 214 et 218.

⁴⁴ « *The smiting god* », Collon, 1972 : 131. Le dieu de l'Orage est cité dans les textes d'Emar comme un des plus importants du panthéon, Fleming 1992 l'identifie au dieu Ba'al : 206, 214.

combattant⁴⁵ sur les statuettes en métal, il l'est fréquemment sur les sceaux cylindres, y compris à Emar⁴⁶ : le dieu de l'Orage y apparaît vêtu d'un pagne court, sa coiffure a une forme différente de celle de la statuette, elle se termine parfois par une petite excroissance, fréquemment représentée sur la côte levantine (fig. 4)⁴⁷. La statuette d'Emar est pourvue d'une simple tiare de forme conique, vraisemblablement un casque, qu'Amiet⁴⁸ a qualifiée de typiquement syrienne. Cet objet appartient à la série des statuettes du dieu terrassant (*Smiting god*), dont la jambe gauche est avancée, avec, le plus souvent, le bras droit levé brandissant une arme, et l'avant-bras gauche, placé à l'horizontale, tenant à l'origine un bouclier ou un arc.

Comment la statuette d'Emar s'intègre-t-elle dans la production de la Syrie du nord ? Peut-on déceler une influence d'Anatolie ? Par son style iconographique, elle correspondrait, dans son ensemble, plutôt au type iconographique du "Ba'al syrien" défini par Beyer⁴⁹ pour la glyptique d'Emar. En effet, on ne décèle aucune influence égyptienne ou syro-hittite. La tiare conique courte se trouve aussi sur certaines statuettes de Judeideh, récemment datées du Bronze moyen, plus rarement dans la production hittite⁵⁰. Le visage barbu a des traits un peu rudes qui trouvent une certaine parenté avec celui des figurines de Judeideh, des montagnes libanaises ou de Saida⁵¹. Le pagne court, parfois incisé, trouve des parallèles en Syrie du nord et dans le monde hittite⁵² ; par contre, à Ras Shamra⁵³, le style très différent de celui d'Emar.

⁴⁵ Sauf sur une statuette provenant du Liban, Seeden 1980, 119, pl. 110/ 1785, l'animal semble être un boviné. Sur un autre exemple, il s'agit d'un lion, Collon 1972, p. 112, fig. A (bronze de la collection Pomerance, New York, hauteur totale 15, 1 cm dont 10,9 cm pour la statuette). Plus récemment une statuette en bronze d'un dieu debout sur un taureau conservée au musée de l'université de Bonn, hauteur 8 cm, qui serait plutôt, semble-t-il, de fabrication récente, Meyer 2007.

⁴⁶ A Ras Shamra, il apparaît sur des sceaux de style syrien classique ou plus schématique, Amiet 1992 : 34 et fig. 11/ 45, 37, 71 et fig. 28/146, 79. A Alalakh, Collon 1975, le dieu de l'Orage porte un bonnet pointu et une paire de cornes : pl. XXV-XXVI. A Emar, le taureau est présent sur les empreintes de sceaux représentant aussi bien le dieu de l'Orage syro-hittite (Teshub), syrien (Ba'al) ou mésopotamien (Adad), Beyer 2001 : fig. 30, 33 et 34. Sur la fig. 33, F13-15, le dieu est représenté avec une coiffure ovoïde munie d'une paire de cornes et d'une longue boucle, son bras gauche ou droit étant levé ; il brandit une masse d'armes, l'autre main tenant en laisse un zébu et portant une hache, ou une arme courbe.

⁴⁷ Mes vifs remerciements à D. Beyer qui a autorisé la publication, pour cette étude, de ses dessins d'empreintes de sceaux d'Emar.

⁴⁸ Forme de tiare « spécifiquement syrienne », selon Amiet 1992 : 87.

⁴⁹ Beyer 2001 : fig. 33. Voir aussi l'iconographie des sceaux d'Alalakh, Collon 1975.

⁵⁰ Judeideh, Braidwood et Braidwood 1960 : pl. 56-59 (photos) ; Seeden 1980, : pl. 1, 1 (dessin) ; Marchetti 2000, reprenant l'analyse de la stratigraphie de la fouille en conclut que la date réelle est du Bronze moyen : personnage nu, avec casque de forme un peu semblable à notre figurine, barbu, corps trapu, porte une lance et une masse d'armes. Özgüç 1999 statuette provenant d'Aktepe, site hittite proche de la Mer Noire, conservée au musée de Tokat : pls. 1 à 4 et photos détail de la tête, pl. 5, 6 et 7, hauteur totale 14, 5 cm.

⁵¹ Seeden 1980 : pl. 1, 1 (Judeideh), pl. 3, 5-6 (montagnes libanaises) et pl. 2, 4 (près de Saida, conservée au Musée du Louvre AO 3951).

⁵² Seeden 1980 : pl. 105/1738 (Doğantepe), pl. 105/ 1739, pl. 27/109 (conservée au British Museum, provient de Syrie du Nord et datée du Bronze récent, cependant l'auteur s'étonne de la présence de ce décor incisé sur le pagne qu'il juge si rare sur ce type de statuettes, et qui le fait douter de l'authenticité de l'objet).

⁵³ Seeden 1980 : pl. 18, 65, p. 21-22, vers 1200 avant J.-C.

La statuette de bronze provenant de Doğantepe⁵⁴, datée d'environ 1300 avant J.-C., comprend certains des points communs avec celle d'Emar : une tiare conique, des traits du visage bien marqués, des yeux creux, un pagne court incisé, des bras rapportés. Notons que le thème du dieu combattant existe depuis des temps plus anciens en Syrie du nord ou en Anatolie du sud-est. Selon Collon⁵⁵, il est attesté sur les sceaux cylindres depuis le XVIII^e siècle à Tell Mardikh-Ebla et à Alalakh et il aurait été probablement adopté en Anatolie à la période du *karum*, c'est-à-dire vers 1800-1700 avant J.-C. Selon Özgen et Summers⁵⁶, les statuettes conservées au musée de Gaziantep et d'Adana dateraient du Bronze moyen et seraient une production d'un atelier du sud-est de l'Anatolie ou de Syrie du nord. Enfin, Negbi⁵⁷ avait émis l'hypothèse d'une datation du Bronze moyen pour certaines des statuettes en métal de Byblos.

Ainsi, on a constaté que l'iconographie du dieu combattant était connue dès le Bronze moyen en Syrie du nord et en Anatolie du sud-est, notamment sur la glyptique et sur la sculpture en métal. C'est pourquoi, dans l'état actuel des connaissances, il semble raisonnable d'admettre qu'au Bronze récent, le thème du dieu combattant faisait partie d'une culture commune à la Syrie du nord et à l'Anatolie du sud-est, définie par Bisi comme une *koiné*⁵⁸. Cette dernière, issue des relations commerciales et culturelles établies dès le Bronze moyen entre l'Assyrie, le monde hittite et le monde hourrite, s'était progressivement développée. Tous ces éléments portent à penser que la statuette d'Emar serait l'expression d'un art local qui était l'héritier de ces échanges, un art de tradition de Syrie du nord ayant essaimé vers l'Anatolie du sud-est, donc un art syro-anatolien.

Le poignard en bronze à manche moulé (fig 5)

Ce poignard⁵⁹ en bronze (185) a été dégagé dans la couche de destruction du Bronze récent. Cet objet, qui est complet, comprend une lame de section rhomboïdale à deux tranchants, dont les côtés biconvexes sont convergents en direction d'une extrémité en pointe. Le manche a une extrémité en forme de queue d'aronde et de section quadrangulaire. Les deux longs côtés de ce manche, qui sont de forme concave, encadrent une cavité destinée à recevoir un décor incrusté. Ce dernier a laissé des traces calcinées, s'agissait-il de bois ou d'ivoire ?

⁵⁴ Statuette trouvée à Doğantepe (Amasya, en Anatolie), datée vers 1300 avant J.-C., Bittel 1976 : 147 (photo), et fig. 148 ; Seeden 1980 : pl. 105/ 1738 (dessin).

⁵⁵ Collon 1972 note 25 : le thème du *Smiting god* existe sur un sceau de Tell Mardikh et sur 13 impressions de sceaux d'Alalakh ; un peu plus loin, ce même auteur émet l'hypothèse que cette iconographie aurait pu être introduite par les Hourrites : 184 et pl. XXV-XXVI.

⁵⁶ Özgen et Summers 1993, « of an early second millenium date » : 109. Ces deux statuettes ont en commun de porter chacune un pagne court, un collier en or et un torque en argent. En outre, celle du musée d'Adana est munie d'un masque en or, : pl. XV, photo des deux statuettes.

⁵⁷ Negbi 1976 : n° 1333, 1334, 1337-1349, tableau 41. D. Collon 1972 émet des doutes sur la datation de l'objet n° 15 (= Negbi 1976, n° 1333-1334, p. 164), en raison du mauvais état de conservation des statuettes en métal de Byblos : 116.

⁵⁸ Bisi 1998 : 280.

⁵⁹ Trouvé dans le carré 35 de la fouille André Raymond, le futur chantier M. Dimensions : longueur totale 24, 8 cm ; lame : longueur max. 2, 1 cm ; épaisseur max. 0, 4 cm.

Une des tablettes d'Emar évoque le procès que Dame Išarte⁶⁰ avait intenté contre son fils adoptif : à la ligne 10 sont mentionnés « ... 1 poignard de bronze hittite, 2 poignards de bronze assyriens, ce mobilier se trouvait dans ma maison ... », il s'agit de la liste des objets qu'elle possédait initialement. On ne peut savoir de quelle forme de poignards il s'agissait. Néanmoins, on remarque qu'à Emar, on distinguait deux catégories de poignards, peut-être en raison de leur style, de leur poids, des techniques de fabrication, ou bien de tout à la fois. Cela atteste, en tous cas, de l'existence de courants d'échanges de la ville d'Emar dans deux directions opposées, l'Assyrie et l'Anatolie.

L'observation du style du poignard n°185, dégagé à Emar, nous permet-elle de déceler des courants d'influence ? Cette question a déjà fait l'objet de nombreuses études de la part des spécialistes. Dès 1960, Jean Deshayes⁶¹ avait noté la présence de ce type d'objet en Grèce ; il pensait à une éventuelle origine occidentale avec une diffusion vers l'Orient. Au contraire, dès 1946, Rachel Maxwell-Hyslop, avait souligné que ce type d'objet existait certes dans le monde minoen⁶², en particulier à Mycènes, mais qu'il s'était surtout diffusé, avec des variantes, dans toute la région du Proche-Orient, depuis la Syrie jusqu'au Caucase. Cet auteur, citait à l'appui de sa démonstration, les exemplaires les plus anciens découverts dans des couches datant du Bronze moyen⁶³, en particulier à Ras Shamra et Chagar Bazar. L'hypothèse retenue par Maxwell-Hyslop était que la diffusion des poignards à manche moulé s'était effectuée à partir de la Syrie et du Mitanni, peut-être même sous influence des Hourrites. Elle semble se confirmer par d'autres découvertes.

On sait que ce type de poignard (avec ou sans ailettes) était muni d'un manche moulé conçu de façon à accueillir d'une incrustation de bois ou d'ivoire. Il était très répandu en Syrie du Nord au Bronze récent. Ce type d'objet a été trouvé aussi en Anatolie et dans la région du Mitanni : en premier, on peut citer le poignard avec manche à rebords, ailettes et rivets de Boghazköy⁶⁴, daté du niveau IV b de Büyükkale, c'est-à-dire vers 1400 avant J.-C. Notons aussi la découverte récente, à Zeyve Höyük⁶⁵ d'un poignard de ce type, tout à fait semblable à celui d'Emar, qui a été récemment dégagé sur le sol du Bronze récent. D'autres exemplaires provenant de Ras Shamra ou de Tell Bazi⁶⁶

⁶⁰ Arnaud 1986 : 47-49 texte 33 (tablette MSK 73266, procès d'Išarte, épouse d'Aštar-abu, contre son fils adoptif). Voir aussi la relecture de Durand 1989 : 181-182 n° 33. Cité aussi par Otto 2006 : note 328.

⁶¹ Deshayes 1960 : 317.

⁶² A l'époque du Minoen Moyen III.

⁶³ Maxwell-Hyslop 1946 : 36 et liste d'objets classés chronologiquement 37-38. Les exemples les plus anciens proviennent de Ras Shamra, (Schaeffer 1939 a, dans tombe LVI : fig. 63, G et E, poignards à ailettes et à rivets non alignés, respectivement 18 et 17^e siècles avant J.-C.) et de Chagar Bazar (Mallowan 1937 : 135 et fig. 13, 6, poignard à manche moulé, à ailettes et à 7 rivets dont 4 alignés, vers 1700 av. J.-C.). L'auteur définit les poignards à ailettes comme étant du type 32.

⁶⁴ A Boghazköy, Boehmer 1972 : pl. XV, 265, et texte p. 78-79, poignard à rebords et ailettes avec deux rivets dont un encore en place, des restes de bois ont été observés sur le manche (niveau IV b de Büyükkale, 1400 av. J.C.). Le même type de manche moulé existe en Anatolie et en Syrie, voir tableau Boehmer 1972 : 43, et fig. 22.

⁶⁵ Zeyve Höyük, anciennement Porsuk, Beyer et al. 2009, poignard à manche moulé d'un niveau vieil hittite. Cet objet daterait plutôt d'environ 1500 avant J.-C. : 339 et fig. 36. Renseignement aimablement fourni par D. Beyer.

⁶⁶ A Ras Shamra, Schaeffer 1948, deux autres poignards avec manche moulé et rebords datant du XIV^e siècle av. J.-C.) : fig. 44, n° 4 et 5. Schaeffer 1956 : fig. 223, à gauche haut et bas, fig. 226 (l'un des poignards trouvé dans la maison du

sont proches du poignard d'Emar. Enfin, une épée courte à rivets et ailettes, datée de 1800 avant J.-C. a été mise au jour à Tell Mozan-Urkesh⁶⁷.

Ces objets circulaient grâce au commerce international : en effet, un poignard à manche moulé et ailettes gisait dans l'épave échouée à Uluburun, près de Kaş⁶⁸ au milieu de la céramique cananéenne, mycénienne, parmi des objets de type égyptien, et aussi des lingots de cuivre (de Chypre) et d'étain (du Taurus, Anatolie). Cette découverte permet de mieux cerner la nature de l'aire de diffusion de ces formes de poignards ; cette dernière était peut-être plus étendue que l'on ne le supposait. En effet, ce type de poignards à manche moulé en bronze a été trouvé aussi en Géorgie, dans des tombes situées sur le versant sud du Caucase ; ils ont été récemment analysés. Selon Motzenbäcker⁶⁹, ce type d'objets n'était pas rare dans le centre du Caucase et en Arménie au Bronze récent.

Ainsi, la diffusion des poignards à manche moulé se serait réalisée à partir du Proche-Orient, de la Syrie du Nord et peut-être de l'Anatolie, dans de multiples directions : vers le Caucase au nord, mais aussi vers le sud en direction de la Mésopotamie et jusqu'en Iran (Tchoga Zanbil) ; enfin, vers l'ouest, depuis le Levant en direction de la Grèce. Pourtant, au Bronze récent, ce type de poignards à manche moulé était depuis longtemps intégré à la culture locale de Syrie du Nord et largement diffusés. C'est pourquoi, celui d'Emar témoigne avant tout d'une production de culture locale.

Les éléments d'armures (fig. 6)

Quatre éléments d'armure en cuivre ou bronze ont été dégagés à Emar⁷⁰ ; ils ont été trouvés sur le sol d'habitations datées du Bronze récent. Deux d'entre eux sont présentés ici (214 et 217)⁷¹. Les trois premiers sont de taille relativement petite avec deux variantes de forme, le bas étant arrondi ou pointu, avec des perforations pour leur assemblage sur du cuir. Les trois éléments d'armure d'Emar ressemblent à ceux de Ras Shamra, ou de Kamid el Loz (Liban), c'est un type répandu au Bronze récent. Le quatrième élément d'armure est deux fois plus grand et d'un type différent ; il est incurvé, peut-être volontairement (?).

grand prêtre, vers 1400 av. J.-C.) ; Calvet et Contenson 2004 : 42, 23, un poignard à ailettes (Bronze récent). Dardaillon 2004 : 190, 178. A Sidon, Saïda 2004, poignard à rebords et à ailettes trouvé dans une tombe du Bronze récent : fig. 16, 32. A Kamid el-Loz, Metzger et Barthel 1993, poignard à manche moulé et à ailettes, Bronze récent, longueur 29,6 cm : 55-6 : pl. 30, 491. A Tell Bazi, Otto 2006, « Dolch », une épée munie d'une lame fragmentaire et d'une poignée dans laquelle des restes de bitume qui maintenait le bois collé au manche subsistent (datée du Bronze récent) : 112, n°56, 2a.

⁶⁷ Dohmann-Pfälzner et Pfälzner 2000 : 200-201, fig. 4-5 (MZ99 C2-i0224, Bronze moyen). Bianchi et Wissing 2009 daté de la période *Alt-Gazira II* ou Babylonien ancien, c'est-à-dire vers 1800 avant J.-C, donc avant la période d'apogée du Mitanni (entre 1500 et 1300 avant J.-C) : pl. 107, n°2123 (dessin), pl. 163 (photo), catalogue 583 et texte 528.

⁶⁸ Pulak 1988, poignard à manche moulé et ailettes presque complet : 22, fig. 23.

⁶⁹ Motzenbäcker 2005, analyse les découvertes en métal de Géorgie, voir poignards ou épées à manche moulé : 148, fig. 4/ 36 (culture de Koban I, XIV-XIIIe s av. J.-C), 155-156, figs. 18 et 19 (Bronze récent). Poignards mis au jour dans des tombes. L'analyse du métal de deux d'entre eux révèle la présence de cuivre avec 13 à 16% d'étain. Voir aussi carte fig. 21.

⁷⁰ Trois d'entre eux proviennent du chantier V (n° 214, 215 et 216), le quatrième du chantier T (n° 217).

⁷¹ Dimensions objet 214 : longueur 4, 7 cm, largeur 2, 8 cm, épaisseur 0, 2 cm. Dimensions objet 217 : longueur environ 10 cm, largeur 4, 9 cm, épaisseur 0, 12 cm.

Les éléments d'armure étaient très répandus et ils ont été découverts dans bon nombre de sites du Bronze récent en Syrie et au Levant. Quelle est l'origine de ce type d'objets ? Notons que, selon Boehmer⁷², l'exemplaire le plus ancien provient du site de Boghazköy, il est daté du XVIII^e siècle avant J.-C., c'est-à-dire du Bronze moyen (niveau Büyükkale IVd). A Boghazköy, on remarque l'existence d'un grand nombre d'objets de ce type et surtout la permanence de l'utilisation des écailles d'armures jusqu'au Bronze récent⁷³. A Nuzi⁷⁴ ont été découvertes 55 écailles d'armure datées du XV^e siècle avant J.-C. D'autres lots nombreux ont été mis au jour à Kamid el Loz (Liban), dans le niveau du Bronze récent ; ils ont permis de mieux comprendre l'agencement des armures. En effet, environ 180 éléments d'armure en bronze, provenant du pavillon royal de Kamid el Loz daté du Bronze récent, ont été restaurés en Allemagne et examinés⁷⁵. Grâce à cette étude, des hypothèses ont été proposées, en particulier sur le mode d'assemblage de ces écailles, sur l'évaluation du poids des armures, sur les différentes tailles d'écailles et aussi leur répartition sur le corps en fonction de leur taille.

Précisons aussi qu'à Boghazköy, le terme *sar-ya-ni* est utilisé pour les éléments d'armure ; or, il provient du mot hourrite *saryani*⁷⁶. Dans la civilisation des Hourrites, l'importance du métal et aussi du cheval apparaît comme évidente, d'après les textes. L'utilisation du cheval est lié non seulement au développement du char de combat, qui serait apparu dès le XV^e siècle⁷⁷, mais aussi des soldats portant des armures à écailles. D'après les textes de Nuzi et d'Alalakh, l'élite militaire, qui possédait un char et d'un cheval⁷⁸, correspondait au sommet de la hiérarchie sociale quadripartite de la société hourrite ; elle portait un nom particulier (*rākib narkabtī* à Nuzi ; *maryanni* à Alalakh). Ce sont les textes de Nuzi qui nous livrent le plus de détails sur les armures à écailles. Ils ont fait l'objet de nombreux articles dans des colloques sur la civilisation hourrite⁷⁹. Il

⁷² Boehmer 1972 : l'exemplaire le plus ancien : pl. XXV, 803, niveau Büyükkale IVd, vers 1800 avant J.-C. (époque du *karum*). Il cite aussi des éléments d'armure plus anciens mais de forme différente, provenant de Palestine : de longues plaques de métal sans perforations et datées de la fin du IV^e millénaire provenant de Kefar Monasch (voir fig. 36a) et de Tell Gal/Erany (voir fig. 36b).

⁷³ Boehmer 1972 quatre autres écailles datent du niveau Büyükkale IVb soit d'environ 1400 av. J.-C. : n° 817, 818, 819 et 820. Deux autres du niveau Büyükkale III, c'est-à-dire d'environ 1300 avant J.-C. : n° 804-805. Enfin, plus récemment Peter Neve, 1993 mentionne une série de 54 écailles en bronze découverte dans le temple n° 9 et datant du Bronze récent : 28, fig. 65 et texte 29.

⁷⁴ Starr 1939 sur 55 éléments, 35 d'entre eux ont été découverts assemblés par la corrosion, datés du XV^e s. av. J.C. : pl. 126 B.

⁷⁵ Ventzke 1983 : 98-100, fig. 48-50, photo en couleur 117. Le poids des différentes armures est estimé entre 9,5 et 27 kg. Ces éléments d'armure ont été réétudiés par Renate Miron, 1990 : pl. 12 (dessin des différents éléments classés par taille), 15-16 (hypothèse de fixation ; localisation des types d'armure sur le corps du soldat), photo en couleur fig. 46 (lot d'éléments d'armure et rivets), p. 173. Au total, 184 éléments en bronze et 157 fragments.

⁷⁶ Les termes désignant les catégories d'armures et leurs différentes parties avaient été définies par Armas Salonen 1955 : 100 et pages suivantes. Voir les précisions et nouveautés apportées par Kendall 1981 à propos des textes de Nuzi : 201-231.

⁷⁷ Zaccagnini 1977 : 21.

⁷⁸ Une même organisation quadripartite dans la société de Nuzi et d'Alalakh, Stein 2009 : 545-546. A Alalakh à l'époque mitannienne (niveau Alalakh IV daté du Bronze récent) existait la classe sociale des *maryanni*, guerriers combattant à cheval, équivalant à la classe des conducteurs de char de Nuzi, appelés *rākib narkabtī*, Dassow 2008 : 352.

⁷⁹ Voir la collection *Studies on The Civilization and Culture of Nuzi and The Hurrians* sous la direction de D. I. Owen et G. Wilhelm.

apparaît ainsi que le terme *kursimdu* ou *kursimetu* était utilisé pour nommer les éléments d'armure, alors que le mot *za-ri-am* était réservé à l'armure complète. En outre, selon Kendall, le terme de *gurpisu*⁸⁰ aurait désigné le casque qui pouvait, lui aussi, être recouvert d'écailles en cuir ou en bronze. Plusieurs catégories de casques apparaissent sur la peinture de la tombe de Thoutmosis IV⁸¹ où sont figurés des guerriers asiatiques. Enfin, nous savons par les textes qu'il existait aussi des armures destinées aux chevaux⁸².

Toutes ces données nous incitent à penser que la civilisation hourrite n'était certainement pas étrangère à la propagation de l'utilisation des armures à écailles. D'ailleurs, comme nous l'avons vu plus haut, les Hittites empruntent même aux Hourrites le mot pour désigner les éléments d'armure. C'est pourquoi, on peut émettre l'hypothèse que l'origine de ces écailles serait l'Anatolie, d'où provient d'ailleurs l'écaille la plus ancienne, ou peut-être même le monde hourrite d'où proviennent de nombreux textes sur les armures. Cela demande, bien sûr, à être vérifié par des fouilles archéologiques dans des sites de l'aire hourrite, cependant, relativement peu de niveaux mitanniens ont été atteints, pour l'instant. Néanmoins, on peut en déduire que les éléments d'armure dégagés à Emar témoignent d'une culture locale au Bronze récent, mais aussi d'une influence plus ancienne provenant du Mitanni ou d'Anatolie.

Le plat ou plateau d'Emar (fig. 7)

Le plat (197)⁸³ ou plateau, qui est de forme triangulaire avec un fond dissymétrique et peu marqué, est muni de larges bords, les marlis. Il a été découvert sur le sol de la cella du temple du devin (M1) au chantier M. La forme de cet objet est singulière et l'on rencontre des difficultés à trouver des exemples semblables provenant d'autres sites. Le plus souvent, les objets apparentés à celui d'Emar, provenant d'autres sites, sont circulaires, avec ou sans marli, ou bien triangulaires mais sans marli, et presque jamais avec un fond dissymétrique. L'appellation de plat ou plateau a été choisie, car la forme de cet objet, démunie de bec verseur, indique plutôt une utilisation rituelle en tant que contenant d'objets solides que de vase à libation. Il a pu contenir de l'encens ou d'autres matières solides, qui étaient présentées lors du rituel.

Des plateaux sont mentionnés dans des textes d'Emar⁸⁴ qui ont été découverts dans le temple de Ba'al et dans le temple du devin (M1). Par exemple, on lit dans l'inventaire du temple du devin, lignes 1 et 2, « *un plateau d'argent où se trouve une statuette d'or ...* » et plus loin, lignes 7 et 8, « *un plateau d'argent : s'y trouve encore une*

⁸⁰ Kendall 1981 : 201-205 conteste notamment les interprétations de Armas Salonen (1955 : 100 et pages suivantes) et de Ekki Salonen (1965 : 98 et pages suivantes) qui ont interprété le *gurpisu* comme étant une cuirasse recouvrant le corps.

⁸¹ Dessins dans Kendall 1981, représentations égyptiennes de guerriers de Syrie du nord ou du Mitanni : p. 223, fig. 8d.

⁸² D'après les textes de Nuzi, *sariam ša sisi*, armure pour cheval et *sariam ša aweli*, armure pour l'homme Kendall 1981 : 202.

⁸³ Plat ou plateau n° 197, dimensions : 20, 2 sur 12, 2 cm, épaisseur 0, 2 cm, profondeur maximum 0,2 cm. Un deuxième plat ou plateau n° 198, plus petit, a été découvert au même endroit, dimensions : 10, 1 sur 6, 7 cm, épaisseur 0,1 cm, profondeur maximum 0, 2 cm.

⁸⁴ Deux plateaux (*marshu*) d'argent sont mentionnés lignes 1 et 7 de l'inventaire du temple M1, Arnaud 1986 : 277-278 n° 282 (Msk 731002). Six plateaux en argent figurent aussi dans l'inventaire du trésor d'Astarté de la ville, dégagé dans le temple de Ba'al, Arnaud 1986 : 59, n° 43 (Msk 7395).

divinité protectrice d'argent où se trouvent trois statuettes d'or ... ». On constate que ces plateaux contenaient des objets en métal précieux. Ils appartenaient aux trésors des temples et ont pu être utilisés pour le rituel. Dès le Bronze moyen, dans les archives royales de Mari⁸⁵, des plats et bassins en bronze ou en argent de différentes tailles sont mentionnés, dans un contexte de vaisselle de luxe. Faudrait-il pour autant prendre à la lettre la traduction du mot plat ou plateau dans les textes d'Emar ou de Mari, et croire ici à la correspondance entre les textes et les objets découverts, fait si rare en archéologie ? La prudence s'impose, car il n'est pas du tout sûr que les termes qui sont traduits par plateaux correspondaient exactement à la forme des objets trouvés à Emar.

On constate que quelques objets relativement proches, par leur forme, de nos plateaux d'Emar ont été découverts en Mésopotamie, par exemple à Ur, à Tello et à Suse⁸⁶, cependant ils sont beaucoup plus anciens. En effet, ils sont datés de l'époque du dynastique archaïque ou de celle d'Akkad. La composition du métal de certains d'entre eux a d'ailleurs été récemment analysée⁸⁷ : par exemple, les 6 récipients provenant d'Ur, sont en argent, en bronze ou en cuivre. Cette série de vases à bec verseur présente des points communs dans leur forme générale deltoïde : les deux longs côtés vont en s'élargissent en oblique, le petit côté le plus large se terminant en pointe tandis que l'autre extrémité beaucoup plus étroite est munie d'un bec verseur façonné en oblique par rapport à l'axe longitudinal. Le fond de ces objets a une profondeur variable et est dissymétrique ; de plus, on remarque qu'ils sont dépourvus de marli et de manche. Récemment, le site syrien de Tell Barri-Kahat a livré un exemplaire de vase à bec verseur en albâtre ; il est presque complet et est daté de la fin du troisième millénaire avant J.-C.⁸⁸. La présence du bec verseur indique que ce type de vase contenait des liquides, il était donc vraisemblablement utilisé pour les libations, contrairement au plat d'Emar.

Ainsi, la forme des vases à bec verseur en métal est bien attestée en Mésopotamie et semble *a priori* typique de cette région ; notons que les vases de forme circulaire munis d'un marli existent aussi, dès le dynastique archaïque dans cette région. La découverte récente du vase à bec verseur en albâtre à Tell Barri montre néanmoins que ce type de vases rituels existait aussi en Syrie dès la fin du troisième millénaire, même si les fouilles n'en ont révélé qu'un seul exemplaire. Un objet en bronze de Kamid el Loz⁸⁹, qui est

⁸⁵ Plats ou bassins en bronze ou en argent de différentes tailles mentionnés dans les archives royales de Mari à propos de la vaisselle de luxe au Bronze moyen Guichard 2005 : 201-202, 228 et 244. Leurs noms sont *iqur(t)um* (sorte de bassin ou assiette creuse), *makal(t)um* (plat) et *mušihum* (bassin ou grand plat qui aurait pu servir lors d'un repas ou pour présenter des offrandes).

⁸⁶ A Ur, Müller-Karpe 1993 : pl. 135/1458 et 218 (Ur, Dynastique Archaïque) ; pl. 139, 2281. A Tello, Müller-Karpe 1993 : pl. 22, 95 et p. 41 (Tello, daté par Parrot 1948, fig. 31 h, comme présargonique). A Suse, Tallon, 1987 : 271, 748, catalogue 76 et 204, type A 5b (vers 2500 avant J.-C.).

⁸⁷ Hauptmann et Pernicka 2004 : pl. 54, récipients d'Ur (Dynastique archaïque), n° 916 en argent (98%) ; n° 917 en bronze (cuivre 77%, étain 17,9%), n° 921 en cuivre (95%). Hauptmann et Pernicka, 2004 récipient provenant de Tello : pl. 139, n° 2277, composé de 97% cuivre et d'un alliage de nickel, d'arsenic, d'étain en faibles quantités ; récipient à bec verseur n° 2281, en bronze, comprend 89% cuivre et 9, 2% d'étain, daté du DAIII/Akkad.

⁸⁸ Objet identifié par l'auteur comme étant un vase rituel découvert dans l'aire de fouille G, secteur C-D, 1-6 et daté de la fin du IIIe millénaire avant J.-C. Pecorella 2003 : 20, 41 (photos et dessins) et 139-140.

⁸⁹ A Kamid el-Loz, Miron 1990 : 61, pl. 11, 3, fig. 40 (photo en couleur), vers 1350 av. J.-C.

muni de larges marlis et d'un long manche, est contemporain des objets d'Emar, mais il est de forme circulaire. Pourtant, malgré la différence de forme, c'est l'objet, qui, à l'heure actuelle, nous semble le plus proche de celui d'Emar. Il doit correspondre à un usage rituel de même type qu'à Emar.

On constate que, dans l'état actuel des découvertes, il est difficile de trouver un exemple contemporain vraiment proche du plat ou plateau d'Emar : sa forme triangulaire, avec de larges marlis et sans bec verseur est tout à fait originale et rare ; elle est différente de celle des vases en métal les plus anciens provenant de Mésopotamie ou de Syrie.

L'hypothèse la plus vraisemblable est que le plat ou plateau d'Emar, qui a été découvert dans le temple du devin, correspondait aux besoins du rituel en vigueur, conforme à la culture religieuse locale du Bronze récent.

La situle (fig. 8)

La situle⁹⁰ (190) est un vase ouvert de forme profonde et de section peut-être ovale ; elle est munie de trois chaînettes de suspension. Elle gisait écrasée et fendue, sur le sol d'une maison du chantier T. Il est difficile de trouver un exemple parallèle et contemporain de cette situle. Des objets de formes semblables datant de la période dynastique archaïque ou de la période d'Akkad existent en Mésopotamie, par exemple à Ur ou à Kish. Un exemplaire un peu plus récent, de provenance inconnue et daté de l'époque Isin-Larsa, est conservé au musée de Bagdad (IM 48 364)⁹¹. Un vase en bronze, suspendu à trois ou quatre chaînettes, et de forme semblable à celle de notre objet a été découvert à Metsamor, dans une tombe d'Arménie⁹², qui est datée du Bronze moyen ou récent. C'est l'exemplaire le plus proche de la situle d'Emar. De section qui paraît sphérique, avec un fond incurvé, les chaînes s'accrochent à ce vase par l'intermédiaire de quatre tenons en forme d'oiseaux aux ailes éployées, rivetés sur le bord, leur bec étant dirigé vers l'intérieur. En raison du grand nombre de récipients de ce type mis au jour en Mésopotamie dans des périodes anciennes, on est tenté de poser l'hypothèse suivante : cette catégorie de situle serait plutôt d'influence mésopotamienne, et elle se serait diffusée ensuite vers la Syrie du nord et jusqu'en Arménie.

Les pointes de flèches à barbelure (fig. 9)

Cinq pointes de flèches (163 à 167), ayant une partie fonctionnelle composée d'un pédoncule et de deux barbelures, ont été mises au jour à Emar, trois d'entre elles sont

⁹⁰ Dimensions : 13 à 14 cm sur 6 à 7 cm ; épaisseur 0,12 cm.

⁹¹ Müller-Karpe 1993 : n° 785 (Ur, DA IIIb), n° 977 (Kish, DA IIIb) et 134-135. Rouault et Masetti-Rouault 1993 : 297, 206, catalogue 448 (Tell Munbaqa, période d'Akkad). Le métal de l'exemplaire d'Ur, (Müller Karpe 1993 : 785), a été analysé, voir Hauptmann et Pernicka 2004 : pl. 62, il est en bronze (80% de cuivre et 15,5% d'étain). Voir aussi Hauptmann et Pernicka 2004, un récipient de provenance inconnue, qualifié de seau (époque Isin-Larsa), à profil cylindrique mais avec deux chaînettes fixée de part et d'autre du bord et se rejoignant dans un anneau : pl. 135/229. Il est en alliage cuivre, plomb et arsenic, conservé au Musée de Bagdad (IM 48 364).

⁹² Khanzadian 1995, trois chaînettes sont visibles sur le dessin, mais en réalité il doit y en avoir quatre, puisqu'il y a quatre tenons rivetés sur le bord du vase : 43 et fig. 16 (dessin), dimensions non indiquées.

présentées ici. Les pointes de flèche 163 et 164⁹³ ont été retrouvées sur le sol de la cella du temple de Ba'al, la troisième (167) sur le sol d'une maison d'habitation. Au Bronze récent, bon nombre d'autres sites de Syrie du nord ont fourni des pointes de flèches à barbelure comme par exemple ceux de Tell Bazi, de Tell Atchana et de Tell Sabi Abyad⁹⁴.

Cependant, il faut remarquer que de nombreux exemplaires de pointes de flèche à barbelures plus anciens sont attestés sur des sites anatoliens, en particulier à Boghazköy et Alishar Hüyük⁹⁵. Ceux qui proviennent de Boghazköy, ont été trouvés dans le niveau Büyükkale IVb (n° 817, 818, 819 et 820), daté d'environ 1400 av. J.-C. D'autre part, un relief d'Alishar Hüyük présente un archer accroupi en train de bander son arc avec une flèche à barbelures⁹⁶. C'est pourquoi il semble que, concernant les pointes de flèche à barbelure, le courant d'influence proviendrait d'Anatolie.

CONCLUSION

Du point de vue stylistique, il apparaît que la plupart des objets métalliques mis au jour à Emar relève de la culture locale syro-levantine. C'est le cas, par exemple, d'objets de la vie courante comme les outils ou les armes, en particulier les pointes de flèche à lame foliacée, les poignards à manche moulé et pour la statuette divine ; le courant d'influence mésopotamienne se manifeste assez peu, il est plutôt sous-jacent et daterait de périodes plus anciennes, par exemple pour la situle, de même que l'influence hittite, en particulier pour les écailles d'armure et les pointes de flèches à barbelures. Dans l'état actuel des connaissances, il est difficile de préciser s'il existe à Emar une influence hourrite, car il manque encore des résultats de fouilles des niveaux mitanniens en Syrie du nord ou en Turquie de l'est, afin pouvoir comparer et mieux se positionner ; cette question reste ouverte.

Ainsi, au terme de cette étude d'une série d'objets, il nous apparaît que la production métallique d'Emar du Bronze récent atteste avant tout de l'existence d'une culture locale commune aux villes de Syrie du nord. L'opinion de Şerifoğlu⁹⁷ semble se

⁹³ Dimensions de la pointe de flèche 163 : 10, 5 sur 2, 5 cm, épaisseur 2, 5 cm. Pointe de flèche 164 : 8,5 sur 2,3 cm, épaisseur 0,8 cm. Pointe de flèche 167 : 7, 9 sur 2, 1 cm, épaisseur 1, 2 cm.

⁹⁴ A Tell Bazi, Otto 2006, : 116, fig. 57/4a (5 pointes de flèches à barbelures corrodées ensemble) et 57/4b (une pointe de flèche à barbelures, trouvée dans H.16 NR 4). La longueur varie entre 8,5 et 11,2 cm, la largeur entre 1,6 et 1,9 cm., l'épaisseur entre 0,5 et 0,95 cm. D'autre part, 54 pointes de flèches en bronze appartiennent à la « ville nouvelle du dieu Erra » (CM 13, n° 28 :5) ; CM 13, 21 : 2 arcs et 10 flèches. Deux types de pointes de flèche sont attestés, avec une extrémité fortement pointue ou non. Leurs formes sont très proches des objets n° 163 à 165 d'Emar. A Tell Atchana, Woolley 1955 : 282, pl. LXXI, 13 (à ailerons), 14 (à barbelures), Bronze Récent ; à Tell Sabi Abyad, un exemplaire, Akkermans : 1993 30, fig. 21, 72 (à ailerons, 1300-1200 av. J.-C.). Deux exemplaires de pointes de flèche à ailerons ont été découverts à Tell Kazel, Capet 2003 : 88, fig. 25 et 97, fig. 32 (Bronze récent).

⁹⁵ A Boghazköy, Boehmer 1972 : pl. XXVI-823 (Büyükkale IVb, vers 1400 av. J.-C.), pl. XXVII-830 (Büyükkale III, vers 1200 av. J.-C.) et pl. XXVIII, 853 (Büyükkale I, époque phrygienne). A Alishar Hüyük, Von der Osten 1937 : fig. 290/ b 2151 et fig. 291/ d 2462, d 2791, une pointe de flèche et deux pointes de lance datées de la période des empires hittites.

⁹⁶ Boehmer 1972, dessin de l'archer accroupi en train de bander son arc avec une flèche à barbelures, d'après un relief d'Alishar Hüyük : 105, fig. 37.

⁹⁷ Şerifoğlu 2009 : 180.

confirmer, à savoir que les objets en métal de la ville d'Emar, dans l'ensemble, témoignent surtout d'un lien étroit avec le Levant, de quelques liens relativement faibles d'influence culturelle hittite ou hourrite et aussi mésopotamienne. Au Bronze récent, les cultures voisines paraissent avoir été assimilées à Emar, tout en les personnifiant. En définitive, en dépit des contacts commerciaux et culturels multiples dus à sa position géographique de carrefour et de rupture de charge, la région d'Emar semble avoir su préserver son originalité, tout en ayant maintenu un lien culturel privilégié avec les autres villes de Syrie du nord et de la côte levantine.

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Cu = cuivre ; Zn : zinc ; Pb : plomb ; Sn = étain ; As = arsenic ; Sb = antimoine ; Fe = fer ; Ag : argent ; Ni = nickel ; Bi = bismuth ; Co = cobalt
Co = cobalt ; Au = or.

Objets	N°	N° inv	Cu	Zn	Pb	Sn	As	Sb	Fe	Ag	Ni	Bi	Co	Au
épinge	7	AO 27038 MSK 76.18	71,02	7.86	17.7	1.34	0.380	0.289	1.21	0.093	0.068	0.017	0.019	0.0013
burin	24	AO 27031 MSK 74.721	97,86	0.018	0.010	0.043	0.141	0.007	0.928	0.018	0.275	0.015	0.679	0.0031
matoir	32	AO 27024 MSK 73.254	97,50	0.012	0.477	0.353	1.07	0.040	0.278	0.078	0.159	0.012	0.019	0.0010
bracelet	83	AO 27059 MSK 73.153	71,52	16.2	9.63	1.37	0.164	0.224	0.504	0.286	0.081	0.011	0.014	-
bague	98	AO 27059 MSK 73.153	83,79	13.4	2.24	0.256	0.033	0.046	0.054	0.014	0.141	<0.003	0.021	<0.0002
bague	99	AO 27059 MSK 73.153	81,22	15.1	0.96	2.15	0.256	0.126	0.051	0.042	0.056	0.019	0.012	0.0023
javeline	175	AO 27014 MSK 73.163	96,63	0.012	0.095	0.065	1.11	<0.005	0.123	0.013	1.86	0.014	0.075	0.0009
poignard	185	AO 27054 MSK 73.294	89,90	0.020	0.127	9.16	0.407	0.011	0.174	0.016	0.119	0.006	0.055	0.0006
			93,54	0.013	0.100	5.56	0.431	<0.005	0.178	0.013	0.104	0.007	0.047	0.0012
barre	224	AO 27055 MSK 73.249	98,80	0.023	0.093	0.048	0.522	0.056	0.270	0.014	0.060	0.011	0.092	0.0017

Fig. 1. Résultats des analyses de 9 objets en métal provenant de la ville d'Emar (d'après MM. Menu et Hurtel Laboratoire du Musée du Louvre, 1981).

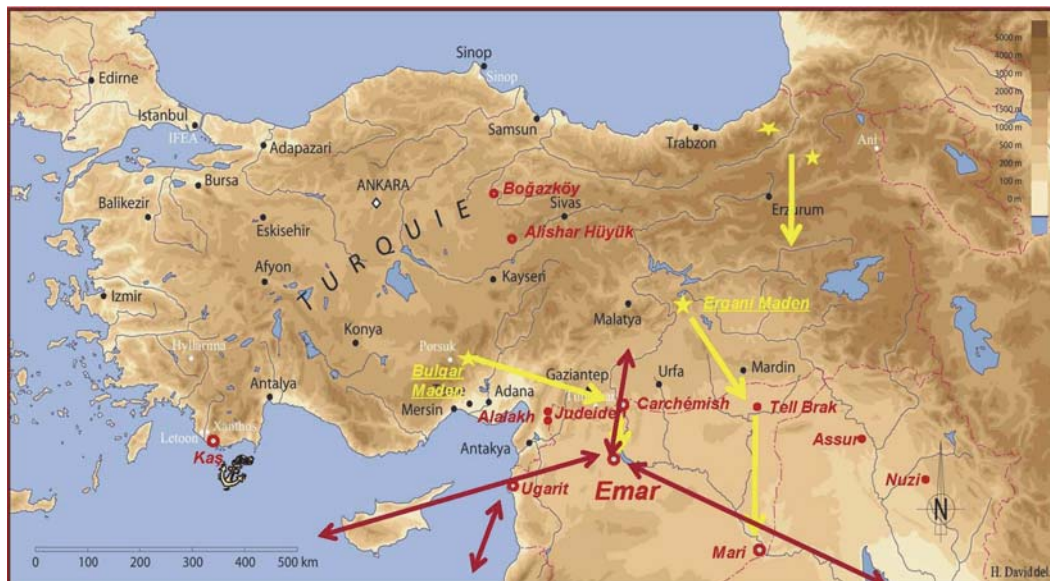


Fig. 2. Carte des courants d'échanges des métaux concernant Emar au Bronze récent (d'après H. David).
Légende : * centres miniers ; courants d'échanges de produits miniers.

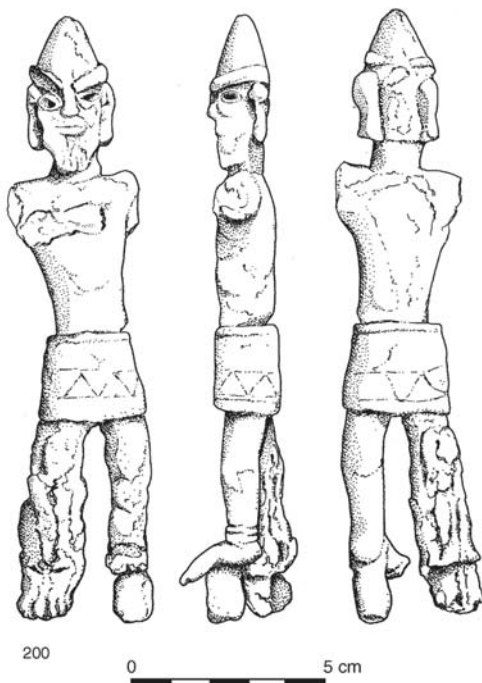


Fig. 3. Statue anthropomorphe (200), dessins.



Fig. 4. Empreintes de sceaux d'Emar représentant Ba'al, le dieu de l'orage syrien, dessins.
D'après Beyer 2001 : 260-261 (F13, haut et F15, bas), 305.

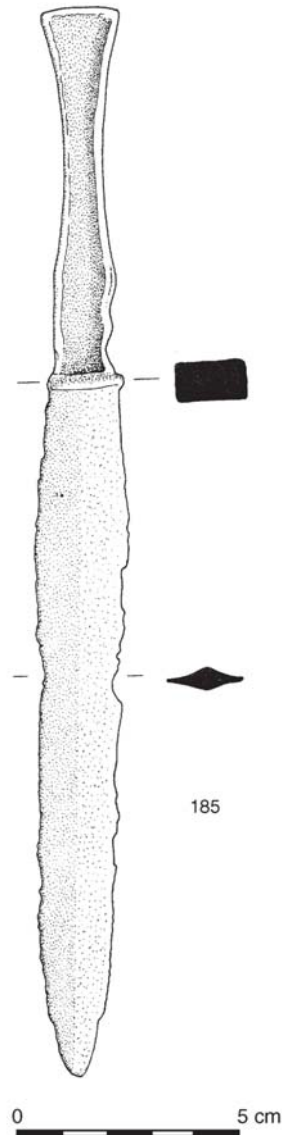


Fig. 5. Poignard 185, dessin.

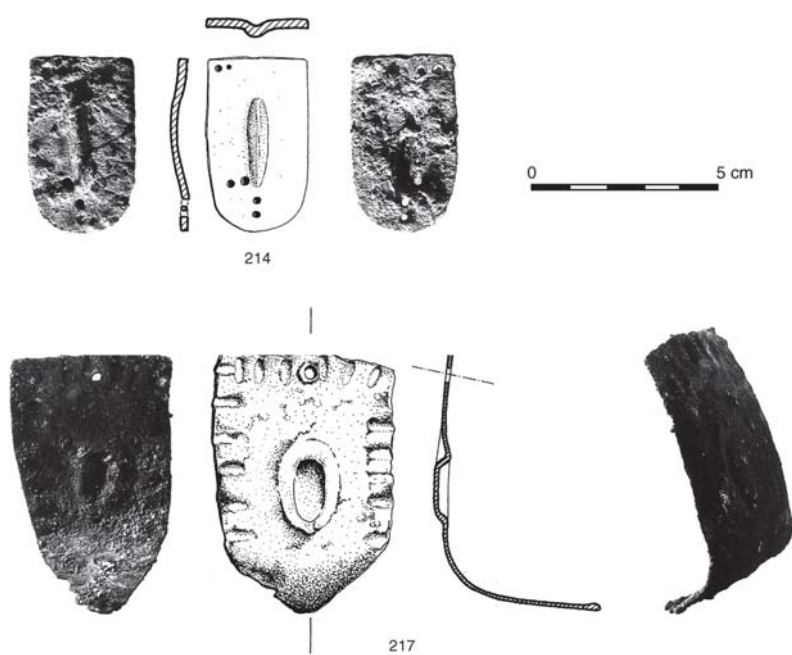


Fig. 6. Eléments d'armures (214 et 217), dessins et photos.

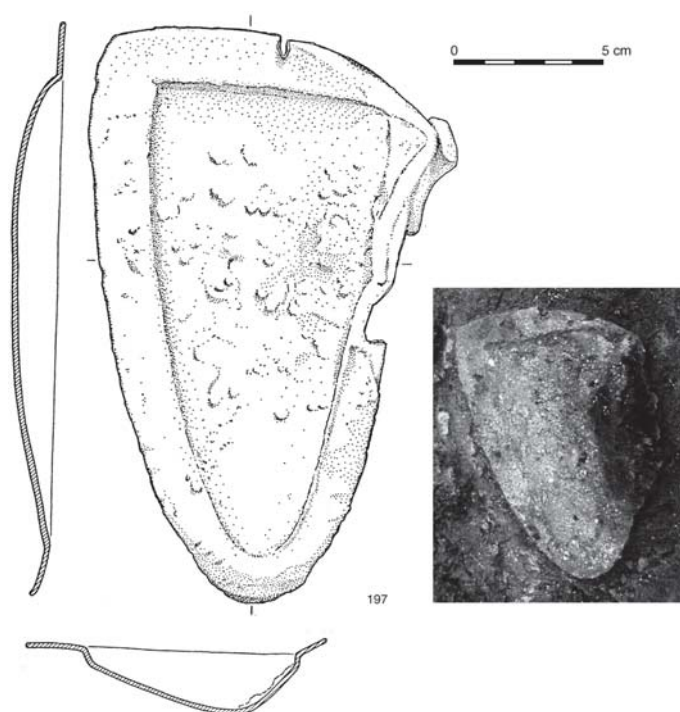


Fig. 7. Plat ou plateau (197).

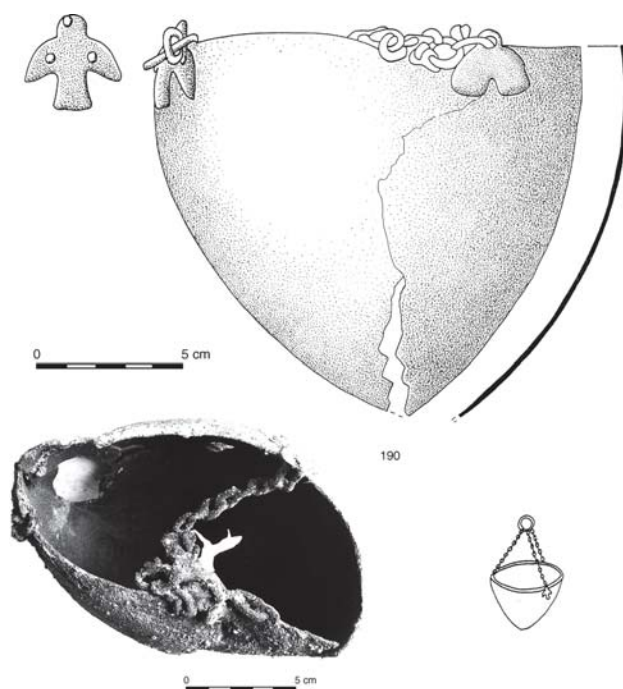


Fig. 8. Situle (190), dessins et photo.

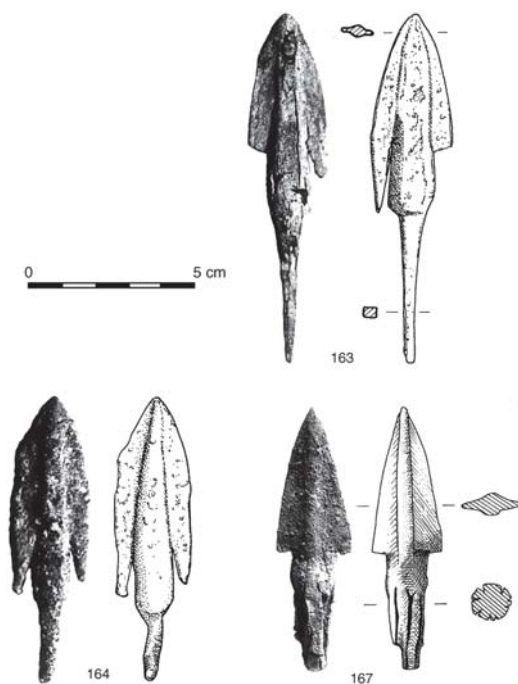


Fig. 9. Pointes de flèches à barbelures (163, 164 et 167), dessins et photos.